

Future Consumers  
Ofgem  
10 South Colonnade  
Canary Wharf  
London  
E14 4PU

27 November 2024

Dear Future Consumers Team,

Thank you for the opportunity to share our views on the consultation regarding innovation in the energy retail market.

We have carefully reviewed the consultation and its accompanying questions. We are pleased to provide our responses below, contributing our views to help improve both the domestic and non-domestic energy markets. Our aim is to support enhancements in services and products while ensuring the protection of all consumers, particularly those with vulnerable characteristics.

100Green supports the steps being taken to improve the market. However, we encourage Ofgem and relevant Government Departments to ensure that the interests of all stakeholders in the transition to the new energy market are protected, not just a select few. We are committed to maintaining engagement throughout this transition via constructive dialogue.

If you have any questions or wish to discuss any of our responses, please do not hesitate to contact us.

Yours sincerely,

Antonis Lamaj  
Energy Regulation & Compliance Manager

A handwritten signature in black ink, appearing to read 'Antonis Lamaj', with a long horizontal flourish extending to the right.

## 1. Innovation in the retail energy market

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

Various innovations are reshaping both the domestic and non-domestic retail energy markets. In the domestic market, the widespread implementation of smart meters is enhancing consumer engagement by providing detailed insights into energy usage. Dynamic pricing models, such as time-of-use tariffs, encourage consumers to shift energy use to off-peak periods, promoting grid efficiency. However, a review of licence conditions is necessary to allow energy suppliers to offer a broader range of services and products, as current restrictions limit their offerings.

There is also a growing emphasis on green tariffs, driven by increased demand for renewable energy to meet sustainability targets. Energy management applications are being developed to help consumers track their energy consumption and identify cost-saving opportunities. Advancements in energy storage solutions, such as domestic battery systems, enable households to store solar energy for later use, further supporting renewable integration. Additionally, the integration of electric vehicles (EVs) is accelerating, with expanded EV charging infrastructure and customised tariffs catering to EV owners.

In the non-domestic market, demand-side response mechanisms are being adopted by businesses to optimise energy usage by shifting or reducing demand during peak periods. These innovations are enhancing operational efficiency and reducing energy costs.

The scale of these innovations varies significantly. Industry stakeholders are driving widespread adoption of these technologies by leveraging resources to implement them on a broad scale. At the same time, niche innovations are addressing specific market needs. Together, these efforts are transforming the energy retail landscape and driving progress toward a more efficient and sustainable future. However, much more needs to be done to meet targets, and efforts from all parties are essential to ensure success while safeguarding both consumer and business interests.

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

We appreciate the opportunity to contribute to Ofgem's efforts to develop a more sustainable, efficient, and consumer-focused energy system. Below, we outline several initiatives which, while not exhaustive, we believe can play a significant role in driving innovation and progress.

### **i. Dynamic Pricing Models**

Dynamic pricing models offer a potential approach to energy pricing by utilising real-time data on grid demand and renewable energy availability. These models could help align prices with grid conditions, encouraging consumers to adjust their energy usage during periods of high renewable energy availability. By incentivizing such behaviour, dynamic pricing can enhance grid efficiency, support the integration of renewables, and offer consumers the opportunity to benefit from more flexible pricing, while ensuring that stakeholders continue to deliver reliable and sustainable services

### **ii. Granular Pricing**

Granular pricing expands on the principles of dynamic pricing by offering detailed, time-sensitive cost signals. We see this approach as an opportunity to help consumers optimize their energy consumption, particularly during periods of low grid demand and high renewable generation. This system could improve grid load management, reduce reliance on fossil-fuel-based peaking plants, and provide consumers with potential cost savings, all while complementing the efforts of stakeholders to ensure a reliable, efficient, and sustainable energy system during the clean energy transition.

### **iii. Energy-Sharing Platforms**

Community-driven energy-sharing platforms present an opportunity to complement the broader energy system by fostering local collaboration and supporting renewable energy adoption. These platforms could allow households and businesses to share surplus renewable energy, such as solar power, within their communities. By enhancing decentralized energy systems and strengthening community resilience, energy-sharing initiatives can work alongside established stakeholders to accelerate renewable integration and increase consumer participation while maintaining the reliability and scalability of the energy market.

### **iv. Integrated Energy Systems**

Integrated energy systems that combine electricity, heating, and transportation networks offer significant potential for optimizing energy efficiency. For instance, integrating heat pumps with EV charging infrastructure could enable more

dynamic and flexible energy management. We view these integrated solutions as a valuable tool for reducing overall energy consumption and enhancing the use of renewable energy across interconnected sectors, while ensuring that stakeholders continue to play a central role in providing reliable, scalable, and sustainable energy services as part of the evolving energy ecosystem.

#### **v. Behavioural Analytics**

Behavioural analytics offer a promising opportunity to provide personalised energy-saving recommendations to consumers. By analysing individual consumption patterns, these tools could identify opportunities for efficiency improvements, helping to reduce both energy costs and carbon footprints.

#### **vi. Green Financing Options**

We acknowledge that financial barriers often limit the adoption of renewable technologies and energy-efficient upgrades. To address this challenge, there is a need for greater consideration of green financing initiatives, as the current support available may not be sufficient to overcome these barriers.

Making these technologies more accessible to consumers will help facilitate a smoother transition to a low-carbon economy, while ensuring that all stakeholders continue to play a crucial role in delivering reliable and affordable energy services throughout the process.

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

The introduction of new energy innovations will bring both positive and negative impacts for consumers. On the positive side, these innovations can offer consumers greater control over their energy usage, enabling more informed decision-making and potential cost savings. They also align with sustainability goals through the integration of renewable energy solutions and enhance resilience via decentralized systems, which improve reliability and reduce dependence on the central grid.

However, there are challenges to address. Data privacy concerns may arise as consumers may be hesitant to share personal information required for certain technologies. Additionally, some innovations may involve higher upfront costs, which could be a barrier for certain consumers. The complexity of new technologies could also deter adoption.

To maximize the benefits for consumers while maintaining the integrity of the energy system, it is important to simplify user interfaces and provide clear, accessible education about available innovations. Effective collaboration among stakeholders will be vital to streamline service delivery and ensure a seamless consumer experience. Furthermore, offering subsidies or rebates for new

technologies can promote affordability and wider adoption, while ensuring that energy suppliers can continue to deliver reliable, cost-effective, and sustainable services for all customers.

## **2. Enablers and barriers to innovation**

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

#### **i. Enablers:**

Public-private partnerships play a crucial role by encouraging investment in research and development. Collaborations between government entities and private companies help pool resources and expertise, facilitating the creation of cutting-edge solutions that may not be achievable by either party alone.

Another important enabler is the simplification of regulations, including license conditions, which lowers barriers for startups, innovators and current established stakeholders. By reducing bureaucratic hurdles, these streamlined regulations enable fresh ideas and agility to the sector, driving innovation and competition.

#### **ii. Barriers:**

Despite several enabling factors, numerous barriers still hinder innovation within the energy sector. One major challenge is the absence of interoperability standards across devices and platforms. Without standardised frameworks, integrating various technologies becomes complex, limiting cross-platform innovation and slowing the adoption of new solutions.

Another significant barrier is the limited consumer awareness and engagement with emerging energy technologies. Many consumers remain unaware of the potential benefits these innovations can offer, which can slow their widespread adoption. Additionally, there is a lack of sufficient long-term incentives for innovation. Market pressures often push companies to prioritise short-term gains, limiting the investment required for breakthrough technologies that may take years to develop and fully realise their potential.

### **Over Regulation**

As an energy supplier, we are increasingly burdened by overregulation, which requires compliance with a vast range of rules concerning pricing, customer protection, sustainability targets, market operations, and more. This complex regulatory landscape impacts our overall business operations, often leading to higher operational costs and an increased administrative burden. For smaller suppliers, the financial strain of meeting these regulatory demands can be overwhelming, sometimes forcing them to exit the market. At times, it feels as though we must allocate substantial resources and hire additional staff just to

meet Ofgem's reporting requirements, diverting our focus from core business activities.

### **Complexity of License and Codes**

As an energy supplier, we face significant operational challenges arising from the complexity of licensing frameworks and technical codes. These intricate requirements not only slow the market entry of innovative technologies but also demand substantial resources for regulatory compliance. This often diverts attention and investment away from innovation and growth.

The regulatory burden further creates an uneven playing field, favouring established providers with greater resources while putting startups and niche suppliers at a disadvantage as they strive to compete.

### **Unhelpful rhetoric from government/Media**

The media often perpetuates unhelpful rhetoric towards energy suppliers. While we recognise the importance of everyone taking responsibility, it is unfair to place sole blame on suppliers. Negative or inconsistent messaging about the energy sector, such as criticism of profit margins, renewables, or fossil fuels, creates uncertainty and fosters misunderstanding.

Suppliers frequently face backlash from customers who may not fully understand the regulatory and market-driven constraints under which they operate. This rhetoric undermines trust and limits investment in new business models, as we must invest in other services to continuously build that trust. Overly politicised debates about the energy sector can discourage suppliers from innovating in areas such as new services, products, or pricing mechanisms, ultimately stifling progress.

### **Supplier Hub Principle**

The Supplier Hub model requires us to manage all aspects of customer interaction, from billing to energy provision. This centralisation places disproportionate responsibility on us for issues such as network costs or regulatory changes, limiting our capacity to invest in innovative products or services.

However, there are broader implications, as this model stifles market competition. Suppliers ultimately become a bottleneck for introducing innovations like flexible tariffs and demand response solutions, preventing the sector from fully evolving.

### **Price Cap**

The price cap limits the maximum chargeable rate for customers, squeezing profit margins and making it difficult to recover costs. For smaller suppliers, this can result in financial losses and even insolvency. It also restricts the ability to fund research and development or invest in customer-centric innovations.

While we understand and support measures aimed at protecting consumers, particularly those in greatest need, the price cap—along with the challenges highlighted in this response—discourages us from experimenting with new pricing models or efficiency improvements, as there is little room to differentiate or recoup investments.

In summary, these barriers collectively create a challenging landscape for energy suppliers. Overhead costs rise, risks increase, and the ability to innovate and compete effectively is curtailed.

Addressing these challenges requires reforms to reduce regulatory complexity, support decentralisation, and balance consumer protection, as well as the protection of all involved, with the need to incentivise innovation.

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

As an energy supplier, we believe one of the most significant barriers to innovation in the sector is regulatory complexity and inertia. The current regulatory environment tends to benefit only a few dominant players, creating an uneven competitive landscape that slows the adoption of new technologies. Larger, incumbent stakeholders typically have the resources to navigate this regulatory framework, while smaller, more innovative stakeholders face significant hurdles, such as long approval processes, unclear guidelines, and restrictive policies. These challenges make it difficult for new solutions to reach the market quickly and efficiently.

The delays in approval timelines and lack of clarity in the regulatory framework only exacerbate these issues. Slow or ambiguous regulatory processes not only delay the rollout of new technologies but also create uncertainty for those looking to introduce innovative solutions. This can foster a risk-averse culture, where stakeholders are hesitant to invest in new ideas that require regulatory approval. Ultimately, the complexity and inertia within the current regulatory system stifle innovation and impede progress toward a more sustainable and dynamic energy sector.

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

As an energy supplier, we recognise that innovation in the sector is being significantly hindered by regulatory barriers, particularly in the area of dynamic and hybrid tariffs. We are keen to trial and implement dynamic or hybrid pricing models that adjust in real-time based on grid conditions and renewable energy availability. These tariffs have the potential to incentivize consumers to shift their

energy usage to optimal times, helping to balance demand and supply while reducing reliance on fossil fuels.

However, regulatory challenges such as slow approval processes, restrictive licence conditions, and outdated tariff structures prevent us from testing and deploying these innovative pricing models. The lack of regulatory flexibility makes it difficult to experiment with dynamic or hybrid tariffs, which combine both fixed and dynamic pricing elements. These tariffs could offer more customised pricing options, enabling consumers to optimise their energy consumption in ways that not only benefit them financially but also support overall grid stability.

Due to these regulatory barriers, we, as an energy supplier, are unable to fully explore new pricing structures that could drive efficiency, reduce costs, and accelerate the integration of renewable energy. Without the necessary regulatory reform, we are constrained in our ability to introduce flexible and responsive tariffs, ultimately slowing the transition to a more sustainable, consumer-focused energy system.

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

The above question can be addressed differently depending on the perspective being considered. From a supplier's point of view, the current market dynamics play a crucial role in determining how improvements can be achieved. It is essential to assess how changes in costs may impact competition, pricing strategies, and market entry routes, in order to foster a fairer and more competitive market while driving overall improvements.

It is vital to advance the transition to a smarter and more flexible regulatory framework, where the needs of all involved parties can adapt rapidly without incurring excessive costs. This should include ensuring that costs are appropriately redistributed to relevant parties.

We understand that Ofgem's view is to open the market and allow new entrants. However, we believe that for new entrants to join the market, additional compliance and review stages must be introduced to ensure they meet rigorous standards. In recent years, we have witnessed the collapse of energy suppliers, with the resulting financial costs being redistributed across the industry. It is therefore crucial that Ofgem implements robust checks for market entrants to prevent such failures, rather than creating an environment where market entry is overly accessible without adequate safeguards.

Furthermore, numerous regulatory requirements have been imposed on suppliers with the aim of simplifying and improving the market. However, these measures have clearly resulted in increased costs, administrative burdens, and the diversion of resources away from innovation initiatives.



Currently, there are limitations on what can be done and how we can test and trial innovative products and services. There is a strong need to review the current licence conditions and allow existing stakeholders to trial new, innovative products and services, thereby enabling a more flexible regulatory environment.

### **3. Options to improve routes to market for products or services that involve selling energy**

We appreciate Ofgem's intention on improving routes to market for products and services that involve selling energy, as this is vital to fostering innovation and delivering a more sustainable, efficient, and consumer-focused energy market.

#### **Reforming Supply Licence Conditions:**

The current licence conditions are restrictive, requiring us to provide the same services and products to all consumers. This limits our ability to introduce trial services or products that could foster innovation. Greater flexibility is essential for suppliers to test new tariffs and services, as the existing restrictions hinder innovation.

While derogations can be granted under specific circumstances, the process is often complex and incurs additional costs, which deters small and mid-sized businesses from exploring innovative services. Simplifying the process for derogations and introducing clear rules for testing new services can help drive innovation while maintaining consumer protection.

#### **Views on Options for Amending Routes:**

Our perspective on amending routes emphasises the need to strike a balance between fostering innovation and safeguarding consumers and market stability, ensuring the interests of all stakeholders are protected.

For example, introducing targeted reforms to licence conditions could help reduce barriers to innovation. However, such reforms must be accompanied by robust oversight to ensure the protection of everyone's interests, not just a select few.

We also acknowledge that amending routes could open the market to new entrants, but this could introduce risks of market distortions if these entrants are not subject to proportionate regulatory checks. While we recognise the ongoing efforts related to regulatory changes, as suppliers, we need assurance that we will not bear the burden of potential failures of new entrants, which could ultimately impact consumers.

These risks can be mitigated through phased implementation and the establishment of clear, well-defined guidelines.

### **Additional Improvements to Consider**

To further promote innovation, we encourage Ofgem to establish a dedicated innovation pathway that simplifies the process for introducing new ideas, products, tariff trials, and services into the market. This could involve providing clearer guidance on trial approval processes, implementing less complicated and lower-cost procedures, offering funding support for innovative projects such as tariff trials, and fostering stronger collaboration among suppliers, innovators, and stakeholders. Furthermore, creating a centralised digital infrastructure to facilitate data sharing, interoperability, and the integration of new technologies would be transformative in unlocking the market's potential.

In summary, we believe that establishing more flexible and simplified routes to market, reforming licence conditions to allow for innovation trials, and enhancing collaboration among all stakeholders are critical steps. These actions would drive meaningful innovation in the retail energy market while ensuring system stability and reliability, and safeguarding consumers, particularly those most in need.