

How will current reforms affect the retail energy market over the coming years?

Purpose of this document

1. Ofgem's Strategic Narrativeⁱ outlines our vision for the strategic medium-term objectives and priorities to help carry out our principal duty to protect the interests of existing and future consumers in a rapidly changing energy sector. This covers the period until 2023 and, in line with this, there are a number of reforms in train.
2. The aim of this paper is to paint a picture of how a range of relevant Ofgem and government reforms will, taken together, improve the environment for innovation and competition in the retail energy market by 2024¹.
3. This paper doesn't try to predict or forecast wider market developments around technology, innovation or consumer behavioural changes. Instead, it sets out how planned changes to the regulatory framework and industry systems will improve the conditions for an innovative, flexible market to flourish, through:
 - More accurate price signals giving industry a greater incentive to develop products and services that enable consumers to shift their consumption
 - Greater access to data supporting targeted, value-adding services
 - Modernised industry codes.
4. Of course, further reforms may be needed to fully unlock benefits and protect consumers from existing and potential future harms. We'll monitor the impact of planned changes on the market to inform whether further reforms are needed.

¹ In our considerations of the impacts of various reforms by 2024, we've focused on initiatives with strong links to the retail energy market, rather than providing an exhaustive overview.

The energy transformation and the role of the retail market

5. The energy system is undergoing fundamental change in response to the need to decarbonise and meet the UK's 'Net Zero' target by 2050. Significant progress has been made to date, with over 50% of electricity generation in 2019 coming from low-carbon sources. Further policies and reforms are well under way to ensure we use energy more efficiently and switch to low-carbon energy sources to meet our future energy needs.
6. The system is increasingly decentralised, with more businesses and homes generating and storing their own energy. At the same time, electricity demand is set to grow as we increasingly electrify transport and heat.
7. Flexibility is key to making this system work. Flexibility means changing how much energy is generated or consumed in particular places or at particular times to provide services to the energy system. Some estimates suggest that a smart and flexible system could save up to £40bn cumulatively to 2050ⁱⁱ.
8. A strong consumer contribution will be needed to drive these benefits through changes in behaviours and interactions with the energy market. Another study has suggested that up to £6.9bn in whole system cost savings could be generated annually through residential flexibility aloneⁱⁱⁱ.
9. This consumer contribution is dependent on the right products and services being available to provide consumers with smart technologies, automation-led services, dynamic energy tariffs and information about their energy use. This will allow them to have greater control over their energy use and benefit from delivering flexibility to the system. A variety of reforms are in progress to facilitate a transformation in market structure, industry processes and regulatory frameworks. This is underlined by our recent decarbonisation action plan^{iv}.

How will retail market conditions change by 2024?

Benefitting from flexibility and sharper price signals

10. With more variable renewable electricity generation, flexibility is essential for reducing the need for more generation assets, network reinforcement and expensive peaking plants. As we develop the next phase of the joint BEIS-Ofgem Smart Systems and Flexibility Plan, we will continue to drive forward a range of initiatives to remove barriers to smart technologies, enable smart homes, and ensure that markets correctly reward flexibility.
11. Smart metering is fundamental to the move to a smart, flexible energy system. Government has a target of rolling out 53 million smart meters to households and businesses. This will enable near real-time consumption measurement by time of use. This means consumers will be able to better understand and visualise their energy usage and use energy at times when it's cheaper. Many innovations, including providing energy 'as a service' and peer-to-peer trading, are predicated on the smart meter rollout.
12. Market-wide half-hourly settlement^v is expected to enhance the benefits of smart metering as suppliers will be exposed to the true costs of supplying electricity. This should incentivise them to help their customers shift their consumption and unlock flexibility. New products and services such as smart tariffs will enable and encourage consumers to shift their usage away from peak periods.
13. Electric vehicles (EVs) have great potential to lower carbon emissions, improve air quality and help provide flexibility for a decarbonising energy system. To support drivers, government has consulted on mandating that electric vehicle chargepoints are smart-enabled and is currently assessing how to implement regulations to ensure EV chargepoints are interoperable and cyber secure. This means that consumers should be able to engage in 'smart charging' and charge when electricity prices are low or when more green electricity is available, as well as benefit from the flexibility of their EV to provide services to the grid operators.
14. Ofgem's network charging reforms^{vi} will lead to improved price signals linked to the costs and benefits of using the electricity network at particular times or locations, incentivising beneficial flexibility and reducing the need for expensive network reinforcement paid for by

all consumers. Reforms around the role of the System Operator, the transition to Distribution System Operators (DSOs) and the RII02 network price control will support this by ensuring the system as a whole is planned and operated efficiently^{vii}. These reforms will align network companies' interests more closely with consumers', and drive use of more flexible and innovative solutions to manage network issues where most efficient.

15. There are a range of other reforms ongoing to ensure flexibility is fairly rewarded for the value it provides to the system. These include enabling aggregators to access the balancing mechanism^{viii}, reforms to balancing services to facilitate market access and unlock the value of flexibility by the electricity system operator, and distribution networks procuring flexibility solutions instead of reinforcing their networks where it is cheaper to do so. This is resulting in new revenue streams being available to flexibility providers, and an increased ability to 'stack', and move between, different sources of revenues in order to achieve a viable business model.

Improving access to data

16. A number of data initiatives will be implemented, coordinated via our joint Ofgem, BEIS and Innovate UK programme, Modernising Energy Data, which aims to ensure energy data is fit for purpose in the modern world. This work, for example, will set regulatory expectations for the best practice use of data and ensure that needed digital infrastructure services are in place for the sector.
17. This strategic work is supporting our aim to provide consumers with a secure way to give trusted third parties access to their data. This will open the door to more tailored, data-driven customer offerings, with benefits such as appropriate data quality, portability and interoperability, enabling businesses to innovate new customer solutions. Energy data will also be increasingly interoperable with data from other markets, enabling better customer services and outcomes overall.

Reducing barriers to entering and operating in the market

18. We expect that some of the barriers to entering and operating in the market will be reduced. The Retail Energy Code^{ix} underpins the switching programme and will also consolidate the currently separate gas and electricity retail governance arrangements into a single dual-fuel code, run by an independent, proactive code manager. A less fragmented codes landscape will be easier to navigate for innovators and new market entrants.
19. The joint BEIS-Ofgem Energy Codes Review^x aims to build on this and is considering the governance and process of changing the other codes that energy market participants have to comply with. Empowered code managers, new governance arrangements and a clearer strategic direction will enable the codes to keep pace with change, reducing their likelihood of blocking new innovations.
20. These reforms, along with greater access to better quality consumer and system data through the Modernising Energy Data work, will help new entrants navigate the market more easily and help them deliver their innovative propositions.

Encouraging wider engagement with the energy system

21. The low-carbon transition will require consumers to be more engaged – as how and when energy is used must change.
22. To support this, the focus of Ofgem’s consumer engagement work has shifted to enabling and supporting consumers to fulfil their role in decarbonisation. By drawing on international expertise, working with partners and undertaking research, Ofgem will develop a robust and nuanced understanding of the needs of different consumers. This insight will be used to shape and develop Ofgem policies, as well as influencing the wider decarbonisation agenda.
23. For wider consumer engagement, the Ofgem switching programme will deliver reliable, next working day switching. This should increase consumer confidence and may lead to ‘several hundred thousand’ extra successful switches annually^{xi}.

Ensuring consumer protections and fairer outcomes

24. A range of projects are aiming to enhance consumer protections and ensure fairer outcomes for different consumer groups in a changing energy system.
25. Notably, the current default tariff price cap will no longer be in place, with the potential for it to be lifted when conditions for 'effective competition' are apparent. This will be replaced by a successor regime to ensure consumers continue to be protected, particularly those who find it hardest to look out for themselves in this market.
26. Ofgem's Consumer Vulnerability Strategy^{xii} aims to drive the delivery of positive impacts for consumers in vulnerable situations, who may face new challenges in the future. This strategy is underpinned by our view that consumers in vulnerable situations should be able to take advantage of the opportunities provided by the evolving market and not be left behind in the transition to smarter technologies.
27. Other reforms are seeking to ensure that there are appropriate protections for consumers however they access the market. For example, for microbusinesses^{xiii} or users of heat networks^{xiv}. Standards and regulations for smart appliances are likely to be in place to ensure interoperability, data privacy, cyber security and suitable consumer protections^{xv}.
28. Due to Ofgem's Supplier Licensing Review^{xvi}, suppliers are subject to more stringent tests before obtaining a licence to operate. We are also proposing to introduce raised standards suppliers must meet on an ongoing basis, and improvements to current market exit processes. This means consumers would be protected to a greater extent against poor customer service and detriment associated with supplier failure.
29. Lastly, Ofgem's Targeted Charging Review^{xvii} should ensure residual costs for the electricity network are recovered in a fairer way. However, rebalancing the allocation of these charges will inevitably mean some consumers will pay more and some will pay less. These reforms lay the foundations for change, helping to provide a more level playing field for all users, and are an essential part of the overall package of reforms to network charging.
30. Overall, we want to see all consumers treated fairly as the market evolves and new products and services appear.

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- ⁱ Ofgem Strategic Narrative (2019-2023) - <https://www.ofgem.gov.uk/publications-and-updates/ofgem-strategic-narrative-2019-23>
- ⁱⁱ Imperial College London/ Carbon Trust study - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/568982/An_analysis_of_electricity_flexibility_for_Great_Britain.pdf
- ⁱⁱⁱ Imperial College London /Ovo study - <https://www.ovoenergy.com/binaries/content/assets/documents/pdfs/newsroom/blueprintforapostcarbonsociety-2018.pdf>
- ^{iv} Ofgem Decarbonisation Action Plan - https://www.ofgem.gov.uk/system/files/docs/2020/02/ofg1190_decarbonisation_action_plan_web.pdf
- ^v Ofgem Settlement reform - <https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement>
- ^{vi} Ofgem Targeted Charging Review (TCR) SCR - <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment> , and the Access & Forward-looking Charging Review SCR- <https://www.ofgem.gov.uk/electricity/transmission-networks/charging/reform-network-access-and-forward-looking-charges>
- ^{vii} Information regarding [Electricity System Operator reform](#), the [DSO transition](#) and [RIIO2](#)
- ^{viii} Project Terre enables different parties (distributed generation, aggregators and consumers) to register and participate directly in the balancing mechanism without needing to become a licensed supplier. More information can be found here <https://www.elexon.co.uk/mod-proposal/p344/>
- ^{ix} Retail Energy Code - https://www.ofgem.gov.uk/system/files/docs/2019/02/rec_way_forward.pdf
- ^x <https://www.gov.uk/government/consultations/reforming-the-energy-industry-codes>
- ^{xi} Switching programme Impact Assessment - <https://www.ofgem.gov.uk/publications-and-updates/switching-programme-outline-business-case-and-blueprint-phase-decision>
- ^{xii} Ofgem Consumer Vulnerability Strategy - <https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025>
- ^{xiii} Ofgem Microbusiness review - <https://www.ofgem.gov.uk/publications-and-updates/ofgem-announces-strategic-review-microbusiness-energy-market>
- ^{xiv} BEIS Heat Network Framework - <https://www.gov.uk/government/publications/heat-networks-developing-a-market-framework>
- ^{xv} Standards/regulatory requirements around smart appliances
<https://www.gov.uk/government/consultations/proposals-regarding-setting-standards-for-smart-appliances>
- ^{xvi} Ofgem Supplier Licensing Review - <https://www.ofgem.gov.uk/publications-and-updates/supplier-licensing-review-final-proposals-entry-requirements>
- ^{xvii} Ofgem Targeted Charging Review SCR - <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment>