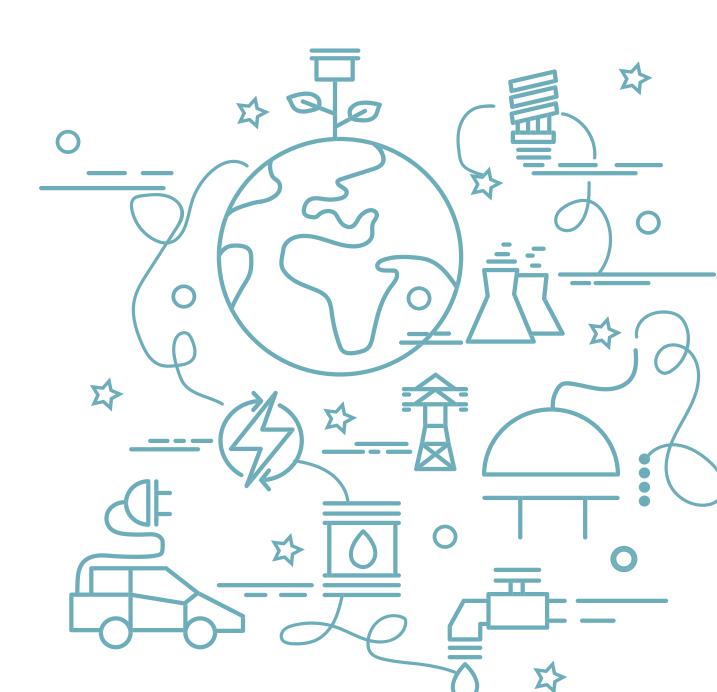
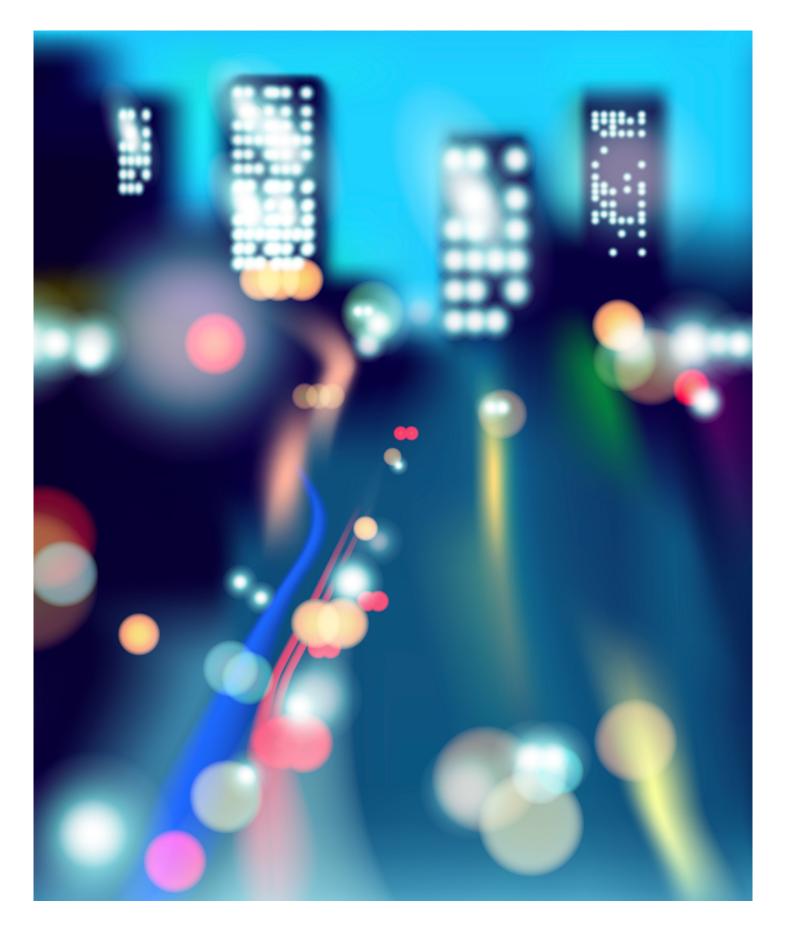


Our strategic narrative

for 2019 - 23





Chair's foreword

In order for Ofgem to protect energy consumers effectively, it is important that we signal how we intend to fulfil this role. This strategy document, which has been produced following engagement with Ofgem members of staff, sets out for stakeholders and other interested parties how we plan to do this over the next four years (2019-2023).

Each year we will also be publishing our detailed Forward Work Plan for consultation, but this strategy provides the overall context for these plans. Given the pace of change in the energy industry we expect it to be revised periodically during this period.

As an open organisation we are keen to engage with others on how we can best meet the opportunities and challenges the future will bring so we can deliver a better energy market for consumers, while still driving towards the Government's net zero carbon emissions goal. Over the next year my colleagues and I will continue to look for opportunities to engage with consumers, consumer groups, innovators, and the industry so we can work together to achieve this goal.

As part of this ongoing conversation we welcome comments on this strategy document, which should be sent to strategy@ofgem.gov.uk.

Martin Cane

Martin Cave Chair, Ofgem



Contents

Ex	ecutive Summary	5
1.	Introduction	. 9
2.	Retail markets	. 14
3.	Vulnerable consumers	16
4.	Network regulation	18
5.	Wholesale energy markets	19
6.	Scheme administration	21
7.	Sustainable development	22
8.	Working at Ofgem	24
9.	Our interactions with other institutions	26
10.	Bringing it all together	27



Executive Summary



This document sets out Ofgem's objectives over the period 2019 to 2023. These objectives are external and internal, focussing both on how we should change our regulatory activities, and how we work as an organisation.

Our vision for the energy system of the future

The energy system is undergoing a fundamental transformation as the processes of decarbonisation, digitalisation and decentralisation accelerate. Government has recently set a policy ambition of reducing the UK's carbon dioxide emissions to net zero by 2050.

We cannot know how exactly the future will evolve, but we can be sure that the pace of change – driven by new technologies – will increase, and that the sector will become increasingly complex.

We believe that a future energy system that works well for consumers will be more interactive between its different constituent parts, with a blurring of the boundaries between producers and consumers, between wholesale markets, systems and retail markets. There will be greater diversity in the types of companies operating in the sector, offering products and services that will cut through this complexity on behalf of consumers. There will of course, continue to be those who do not make active decisions about energy, so there will be an ongoing need for protections to ensure these consumers are not left behind or paying more than their fair share.

As we do today, we will need to work with Government and the system operators to ensure security of energy supplies.

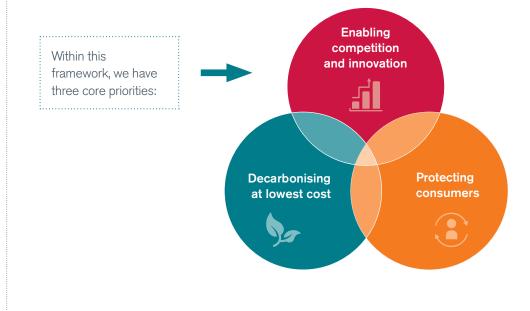
At the end of this period, Ofgem needs to have proven itself to be an organisation capable of delivering major changes to the energy system. The key priorities for Ofgem in this period are:

- develop a successor regime to the current default tariff price cap, which must expire no later than 2023;
- conclude the RIIO2 price control in a way that reduces costs for consumers and supports the transition to net zero greenhouse gas emissions;
- large-scale extension of flexibility markets enabled by appropriate technologies;
- develop the way we consider the sustainable development benefits of regulatory changes;
- a closer understanding of how regulation affects different groups of consumers; and
- develop effective ways of deploying regulated asset base (RAB) financing models for low carbon technologies.



What we intend regulation to accomplish

We operate in a statutory framework set by Parliament, which sets out our duties and gives us powers to achieve our overall objectives. Government is responsible for setting the policy for the energy sector and proposing any changes to the statutory framework. Ofgem has a clear role to play to support policy issues such as decarbonisation, and we need to operate within this framework. We do not direct overall policy in the sector; however, where we think there are important policy gaps that affect consumers, we can call this out.



Enabling competition and innovation which drive down prices and result in new products and services

We aim to achieve this by:

 Encouraging innovation: this will benefit all consumers by making the energy system more efficient, but we recognise some may benefit more than others. We will remove barriers in the regulatory framework to new business models and will enable stronger market incentives for consumers to shift consumption to help manage the system. Improving data quality and access to data across the energy system will be a key part of our approach to facilitating innovation. We will work with Government and Innovate UK on the implementation of the recent Energy Data Taskforce recommendations to transform how the sector manages and shares system data.



Using markets to drive down costs: as well as making the retail market work more
effectively, we will expand our use of competition across network regulation. We
will make greater use of tendering and competition for onshore networks. We will
also create a level playing field so that networks and non-network alternatives can
compete.

Protect consumers, especially the vulnerable, stamping out sharp practice and ensuring fair treatment

We aim to achieve this by:

- Agile consumer protection: consumers will be engaging with a broader range of companies or intermediaries, many of which are not regulated under our current regime. As the market changes we need a regulatory framework that both supports innovation and allows us to respond promptly to any emerging consumer protection issues. We will strike a balance between using general consumer protections and sector-specific protections.
- Driving efficiency and innovation through RIIO2: energy networks sit at the heart of our energy system. We will use cost-efficient incentives, encouraging greater efficiency and innovation, while lowering the costs of investing in these networks. This means better quality services at lower costs to network users and consumers.
- Using targeted interventions for a fairer market: we will intervene to provide backstop protections – such as the default tariff price cap – to ensure all consumers pay an acceptable price for an acceptable level of service.
- Extra consideration for vulnerable consumers: as we facilitate the transition to the future energy system, we will consider the specific impacts on these consumers and the need for any additional protection. We will think carefully about unwinding cross-subsidies that benefit vulnerable consumers. There are limits to our role – for example, it is not to impose social tariffs – but we will work closely with the UK Government and devolved governments on broader policies that help improve outcomes for vulnerable consumers.

Decarbonise to deliver a net zero economy at the lowest cost to consumers

We aim to achieve this by:

Taking a whole systems approach: we need to break down the existing silos across the energy value chain. This will facilitate more competition and create new business opportunities that benefit consumers. We will consider the environmental impacts of all our ongoing regulatory decisions. Increasingly, we will need to think beyond the energy sector as the heat and transport sectors are decarbonised. We will continue to focus on ensuring security of supply for Great Britain's energy system. We will also update our guidance on sustainability, to better inform our decision making processes, particularly in the light of Government's ambition of net-zero emissions by 2050.



- Operating our environmental schemes efficiently and effectively: we will maximise value for money for consumers through the way we administer these schemes. We will focus on providing an effective deterrent to unethical behaviour, fraud and non-compliance and will flag to their owners (such as Government) risks relating to the schemes we operate on their behalf.
- Providing leadership by improving sustainability: we will review Ofgem's internal policies and procedures, for example how staff travel between our main London and Glasgow offices, and will be more transparent about our efforts to reduce our environmental impact.

Changing the way we work

Ofgem has traditionally worked like many other bureaucracies, with a hierarchical structure, formal lines of authority, and a fairly rigid division of labour among people with expert training in their fields. We have many large and well-established teams engaged in different areas of activity, making recommendations and producing written reports which move up and down a hierarchy. Often, when one task is completed, the same team moves onto the next project in the same area. This traditional way of working can lead to inefficiencies, a slower response to changing business and industry needs and a less stimulating working environment for staff.

The Ofgem Board has asked the senior leadership team to develop a more agile way of working, which is more project-based and less durable in structure, with teams forming and reforming more often, retaining professional specialisation where necessary and exhibiting multi-disciplinary ways of working across our three offices in London, Cardiff and Glasgow. We expect such agile teams to operate in a more decentralised way and with more autonomy, knowledge sharing and joint internal decision-making. We need to introduce this in a manner which also recognises the need for specialisms and the retention of industry expertise where appropriate.

More agile working will manifest itself in different ways in different parts of the organisation. But one change will be common to all: our ways of receiving, holding, processing and using data must be improved as a facilitater of greater agility.

We intend to publish more detailed guidance on how this strategy document and our priorities for this period will drive the organisation and our work plan. We will prepare such guidance shortly, which we expect will replace the Regulatory Stances published in 2016.

The Board will regularly review the progress that the organisation is making in delivering our priorities and in changing the way we work. Through our annual consumer impact report, we will regularly publish and measure our progress in protecting consumers and delivering the priorities set out in this document.

1. Introduction



What are we seeking to accomplish in this strategy document?

Ofgem's principal duty is to 'protect the interests of existing and future consumers'.¹ Consumers are of all types, including: households, micro-businesses, SMEs, public sector and voluntary bodies, and industrial and commercial companies. All of these are affected by what happens across the energy value chain. The bargaining position of these different groups varies and may be particularly weak for vulnerable household consumers. This principal duty permeates our whole approach to regulation: it obliges us to evaluate almost any situation or proposed change in the first instance through the lens of energy consumers.

Our duty to current and future consumers is to protect their 'interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them'. In making decisions we must take account of the need to contribute to the achievement of sustainable development.

UK Government makes policy decisions around decarbonisation, including schemes to support non-fossil fuel sources of generation, which are often administered by Ofgem. We have to operate within that framework. While Ofgem cannot make changes to overall policy in the sector ourselves, we can determine how best to carry out our duties through the decisions we make; for example on how we allocate network costs to different system users. This will require us to balance different consumer interests noted above.

The statute, which sets out Ofgem's duties, expressly states that, we must choose whether market competition or more interventionist means such as price controls, better allows us to carry out our principal duty – the protection of the interests of existing and future consumers. Markets, which facilitate effective competition, may well prove desirable, but where there are widespread and intractable market failures, such as high loyalty penalties for consumers who don't switch, more interventionist means are more appropriate.

Ensuring continuity of energy supply requires the maintenance and expansion of networks where needed, and Ofgem is required to ensure that firms are able to meet their necessary and efficient capital and other costs. But the delivery of actual or expected returns in excess of this level is likely to have an adverse effect on consumer interests.

In summary, Ofgem has a role as an economic regulator, acting decisively to protect the interests of all consumers, both current and future. But it has additional roles as regulator to support sustainability and as a protector of the broader interests of vulnerable consumers.

We have prepared this document from the perspective of the period running to the end of 2023 – the year in which all networks are subject to RIIO2 controls and at the



end of which the recently installed default tariff price cap must expire. It also includes the period of the Government's next Spending Review.

We recognise that the changes likely to be brought about by the energy transition in the next four years (and certainly in the next decade) have the potential to be much more radical than is implied by reference to the two regulatory milestones noted above. Ofgem will have to develop a capacity to respond quickly to such changes; as shown below, this is one of the tasks we have set ourselves.

Ofgem's vision for the energy system of the future

Over the next decade, the energy system will undergo a fundamental transformation as the processes of decarbonisation, digitalisation and decentralisation progressively manifest themselves across the system. We cannot know exactly how the future will evolve, nor is it our role to determine it. But we can be sure that the pace of change – driven by new technologies – will increase.

The future will be more complex. It requires Ofgem to be more agile, so we can respond rapidly to change and facilitate the transition to a low-carbon and more cost-effective energy system that delivers good outcomes for all consumers. At the same time, working with Government and the system operator, we need to continue to ensure security of energy supplies as we do today.

It is likely that a future energy system that works well for consumers will be more interactive between its different constituent parts, with a blurring of the boundaries between producers and consumers, between wholesale markets, systems and retail markets. New technologies, such as electricity storage and smarter and more flexible demand side response, will provide viable alternatives to building ever more network and generating capacity to manage peak demand. Markets will find new and cost effective ways of matching supply and demand to manage the system. This will mean different prices at different times of the day across different locations.

There will be more diversity in the types of companies operating in the sector, who will offer consumers a broader range of products and bundled energy services across heat, power and transport and other utilities. Innovation will reduce costs to businesses and consumers and help make better use of networks and other existing energy assets, saving money for everyone and improving service standards.

We expect to see greater digitalisation, with open access to data and intelligent IT platforms automating markets and consumer participation to manage the increased complexity that will be a feature of the future. We need a regulatory framework that requires companies in the sector to open up their data and enables other companies to offer services to reduce complexity. This will make it easier for consumers either to make informed, active choices or to delegate decisions about their energy needs to trusted third parties.



There will of course continue to be those who do not make active decisions about energy, so there will be an ongoing need for protections to ensure these consumers are not left behind.

The context of this strategic narrative

During this period, a decisive start will be made on the transformation of the energy networks and retail markets while the generation sector will continue to evolve with more low carbon generation. Our approach to this new era of sectoral change is guided by our overriding goal to protect the interests of consumers now and in the future, with particular emphasis on protecting the vulnerable, using whatever means of intervention best reaches that goal. We believe that these interests are best protected by an energy system that can attract investment and innovation and keep costs as low as possible, while also promoting sustainability.

Ofgem will therefore focus on three key objectives for consumers:

- 1. Enable competition and innovation which drives down prices and results in new products and services;
- 2. Protect consumers, especially the vulnerable, stamping out sharp practice and ensuring fair treatment; and
- 3. Decarbonise to deliver a net zero economy at the lowest cost to consumers.

Our underlying approach to innovations which improve the situation for consumers is to encourage them. This is likely to involve removing existing regulations and altering others. We will encourage innovation that benefits consumers. However, we are alive to the risk that innovation can benefit certain consumer groups while leaving others behind, or bearing more than their fair share of system costs. We will take steps as necessary to prevent significant detriment of this kind, particularly when the consumers affected are vulnerable.

The energy transition requires a fundamental re-think of energy regulation in Great Britain. Ofgem has begun this task, and carries it forward with this document. In the context of these changes, in November 2018 the BEIS Secretary of State announced four principles of energy policy and regulation as follows:

- the market principle using market mechanisms wherever possible to take full advantage of innovation and competition;
- the insurance principle given uncertainty about the future, government must be prepared to intervene to provide insurance and keeps options open;
- the agility principle energy regulation must be agile and responsive if it is to reap the great opportunities of the smart, digital economy; and finally
- the "no free-riding" or "fairness" principle consumers of all types should pay a fair share of system costs.



Where these principles apply to energy regulation, rather than energy policy, our approach is consistent with them.

By 2023, Ofgem needs to have proven itself to be capable of delivering major changes to the system. Our priorities that will run through this period are:

- development of a successor regime to the current default tariff price cap, which must expire no later than 2023;
- conclude the RIIO2 price control in a way that reduces costs for consumers and supports the transition to net zero greenhouse gas emissions;
- large-scale extension of flexibility markets enabled by appropriate technologies;
- develop the way we consider the sustainable development benefits of regulatory changes;
- a closer understanding of how regulation affects different groups of consumers; and
- the development of effective ways of deploying regulated asset base (RAB) financing models for low carbon technologies.

These are some of the components that which Ofgem will need to regulate the transition successfully.

In order to accomplish this goal, we must make matching changes to our own organisation, by working in a more agile and efficient fashion, with clearer prioritisation.

Ofgem must develop its capacity to collect and manage the increasing amounts of data becoming available and more demonstrably base its analytical methods and decision-making on this expanded resource. Better use of data will enable Ofgem to operate more efficiently, but will also require us to think differently about how to regulate in a data rich environment.

The shape of our activities

Ofgem has two principal activities, which we regard as key and settled components of our work: energy regulation and scheme administration. They have the important common features of being related to the energy sector and discharged by a public body with a public interest remit. We are making efforts to benefit from internal synergies across our activities, and in particular to carry them out with more flexible and integrated teams. This recognises the significant overlaps between the activities, notably with respect to the monitoring of licence compliance and the verification of applications for the schemes we administer on behalf of Government.

These tasks impose costs, which must be covered, and how we perform them has to take account of increasing budgetary pressure and the different sources of funding for each. We do not consider it appropriate for us to cross-subsidise one activity with



the other. We are, however, embarking on a change programme (described below) which will allow us to be more agile and effective in all we do.

As a public body, we have an obligation to assist the UK and devolved governments with additional tasks which fall within our capabilities and conform to our overarching duties. As an example, since 2017 we have acted as a joint competent authority (with BEIS) for cyber-security in the GB energy sector. We have also agreed with BEIS to undertake joint work on methods of regulating new nuclear or other non-carbon generating capacity. Any additional tasks will require additional resources.

The changes occurring in the energy sector increasingly blur the divisions between what have been regarded as separate components of the value chain. Consumers can become producers; networks can be by-passed; software can substitute for hardware. Over the four years from 2019, the divisions between formerly separate activities will become even more blurred, and there will be an increasing emphasis on 'whole system' thinking. This trend will shape our approach to the activities described in the next six sections, which discuss Ofgem's regulatory and scheme administration activities. The final two sections discuss how Ofgem will organise itself and go about its business.

2. Retail markets



The domestic energy retail market is not working well for many consumers, in a number of ways. First, the legacy of many years of a concentrated, uncompetitive retail market is widespread cost inefficiency. Second, while competition has improved in many ways in recent years, this has brought its own issues. The benefits of competition have not been evenly shared: savvy consumers have got better deals while less engaged consumers (on average less well-off and more vulnerable) have paid a penalty for their inertia. Furthermore, the rapid entry of a large number of new suppliers, combined with the subsequent poor customer service and financial failings of some, has raised concerns about fitness to operate in this market. Lastly, many of the basics around quality of service (for example billing accuracy, complaints handling, reliability of switching) are – in parts of the market at least – well short of what consumers should expect for an essential service. Many of these issues are also of concern in the small and micro business market.

At the same time, the retail market is poised on the brink of transformation. The transition to a low carbon economy will fundamentally change the way households and businesses purchase and use energy – for example via the spread of electric vehicles – while digitisation creates new opportunities to automate and optimise.

In this world, businesses and consumers will face more complex choices – not only who to buy energy from but also whether:

- to opt for a time of use tariff and if so, how to optimise energy usage over the course of the day;
- to invest in equipment like smart technologies and storage;
- to buy energy in a bundle with other products, for example other household services, or an electric vehicle; and
- to share their data and if so with whom.

We need a regulatory framework that supports intermediaries and other firms to offer new services to reduce complexity, while at the same time ensuring consumers are protected if they choose these companies to help them meet their energy needs. There are several barriers to consumers making good choices in the current energy market, including not knowing the options available to them and being provided with overly-complicated information by companies. Understanding these barriers, and the behaviour of consumers and companies in response to them, will become more important as the range of different choices increases.

Our focus on the retail market follows two broad and complementary strands. First we are focused on tackling the existing consumer detriment in this market. To do this we have implemented the Government's default tariff price cap, putting in place a tough cap that ensures loyal consumers pay a fair price that reflects efficient costs. Our compliance and enforcement activities are focused on ensuring that licensees meet the stipulated customer service standards. We are also reviewing our rules for who we licence into the market and ensuring that suppliers take a responsible approach to both customer service and financial risk.



However, the current system of price protection is only temporary. The legislation dictates that the current default tariff price cap will last a maximum of five years but can be lifted earlier if the right conditions are met. These are broadly that the retail market works well for the majority of consumers, whether they choose to engage in the energy market directly or delegate that task to an intermediary. Broadly, these are are appropriate backstop protections for those who find it hardest to look out for themselves in this market.

Accordingly, for the duration of the default tariff price cap, we will do whatever we can to promote competition in retail markets. This will require us to put in place a regulatory framework that not only facilitates the energy transition to a low carbon economy, but also allows suppliers to innovate and compete on the opportunities presented by the energy transition, while ensuring consumers remain engaged and protected in this more complex world. All consumers stand to benefit from innovation, which makes the whole energy system more efficient.

We are making the changes needed to enable more competition and innovation (for example the introduction of smart metering and half-hourly settlement) using a combination of our own powers and, where appropriate, partnership with Government and the industry. The regulatory framework must enable innovators and consumers to maximise the opportunities in front of us all.

This work will raise many fundamental questions, for instance:

- In a less concentrated, increasingly differentiated retail market, how should we
 manage those universal service and other social and environmental obligations
 that we have historically put on the largest suppliers?
- In a more complex market, will the role of intermediaries grow, and are there aspects of their activities that should be subject to regulation?
- How can we ensure the central infrastructure of technology and standards underpinning the retail market is robust yet responsive to change?

In addition, we want competitive pressure among suppliers to bear down on costs throughout the value chain. Various factors inhibit this at present, and we are keen to explore ways to go further in this direction.

3. Vulnerable consumers



Energy is an essential service. Warm homes may be most needed by those least able to expend time and effort seeking out good deals or resolving problems – for example people who spend a lot of time in their home because they are elderly, have chronic health conditions, or have small children.

Ofgem recognises that vulnerability can take many forms, and we pay very close attention to the needs of vulnerable consumers and the views of the organisations which speak for them.

This cuts across almost all parts of Ofgem. Funded through our price controls, networks run schemes like the Fuel Poor Network Extension Scheme (FPNES) that rewards network operators for connecting households to cheap sources of heating. We also administer the Government's Warm Homes Discount (WHD) scheme and the Energy Company Obligation (ECO) scheme, which is increasingly focussed on improving energy efficiency for those in fuel poverty. And in our retail work we require all suppliers to treat their consumers in vulnerable circumstances fairly. We are also proposing to introduce a principle-based licence requirement on gas distribution networks relating to the treatment of vulnerable customers.

Our Consumer Vulnerability Strategy coordinates these efforts and ensures a coherent approach. We recently updated this to set our approach until 2025. Through engagement with a wide range of stakeholders we have identified five key themes:

- 1. Improving identification of vulnerability and smart use of data;
- 2. Supporting those struggling with their bills;
- 3. Driving significant improvements in customer service for vulnerable groups;
- 4. Encouraging positive and inclusive innovation; and
- 5. Working with partners to tackle issues that cut across multiple sectors.

These themes raise some big policy questions, some of which are necessarily ones that Government also needs to consider given our respective roles:

How to respond to calls from stakeholders for Ofgem to be more active to protect vulnerable consumers?

At present, our role is to ensure fair prices that reflect the actual costs of providing energy to disengaged consumers and those with traditional prepayment meters, and to administer efficiently the WHD and ECO schemes. Our role is not to implement social tariffs, or drive further cross-subsidy between consumer groups. While some stakeholders would like us to do more, in our view this is not currently within our mandate. Should Government policy change in this respect, we would of course be open to exploring options.

How should social obligations be delivered in the sector?

Are social obligations best delivered by competitive suppliers or monopoly networks? Ultimately this is a matter for Government to decide. But we think there may be advantages to moving some obligations from the competitive sphere (where there is a strong incentive to minimise obligations) to the monopoly sphere. We are exploring this as part of our Future Retail Markets work with BEIS.

To what extent should networks fund affordable heating for fuel poor households?

Given the need to decarbonise heat, RIIO2 might be the last price control period in which the Fuel Poor Network Extension Scheme is funded. In such a situation, should network companies help fuel poor households in other ways, including by providing access to affordable heating from other sources, and if so should this be funded via network price controls? We will need to consider whether there are other activities which networks could undertake that could help those struggling with bills whilst potentially also reducing the costs of tackling climate change.

8

How should we act when considering unwinding existing implicit cross-subsidies?

There have been implicit cross-subsidies in the market since privatisation, for example an electricity price that does not change during the day as supply and demand changes. Now, we may need to unwind such cross-subsidies, for example by introducing bigger price signals that reward consumers for shifting consumption. This would create winners and losers.

Whatever our role in redistribution between energy consumers, we should understand the distributional impact of our work (both from separate interventions and the cumulative impact), particularly on vulnerable consumers. Better and smarter use of data will routinely help us to assess the impacts on different consumer groups. We will find ways to establish the impact of our individual and combined regulatory decisions on different types of household consumers, including vulnerable ones. We will also take a cautious approach to unwinding cross-subsidies that benefit vulnerable consumers, particularly where demand is unresponsive to even sharp price signals.

There will always be limits to what regulation can achieve for vulnerable consumers, and we need to be clear about the complementary roles of Ofgem, energy companies, the UK Government and devolved governments, and the Third Sector. Effective partnership working is key to this.

4. Networks



Ofgem's role as a network regulator is to ensure services that deliver energy to our homes and businesses do so reliably and at an efficient cost. This has traditionally been achieved through monopoly price controls and network charging arrangements. These have delivered consumer benefits in the long term. However, although the current RIIO price controls have secured good services, this has been at a high cost to consumers.

In the lifetime of this document, we will be making decisions about the next round of RIIO price controls (for transmission and distribution). We will use cost-efficient incentives, encouraging greater efficiency and innovation, while lowering the costs of investing in these networks. This means better quality services at lower costs.

In electricity, intermittent renewable generation is set to grow, much of which will be at the local level. We also expect demand to grow in order to power vehicles and possibly heating. Therefore, new technologies, such as batteries and the capacity to more flexibly manage our demand, supported by new trading arrangements, will be important alternatives to building extra network capacity. Ofgem will create a level playing field to allow innovative business models to flourish, as long as they do not adversely affect particular consumer groups in a way which cannot be mitigated.

One approach would be to maintain the system broadly as it is now – with price controls for the onshore network and competition limited to the offshore grid, and the existing charging arrangements. The risk is that this squeezes out alternative approaches from non-network companies and low-cost sources of investment.

The alternative would be a radical increase in competition within networks to ensure network and non-network alternatives compete on a level playing field. This would mean greater tendering for network services and ensuring a fair charging system.

Ofgem's direction of travel is to increase significantly the role of competition in network regulation. This means reforming price controls, introducing tendering within onshore network services and adapting charging arrangements to respond to the changing system. In the long term, to support a new competitive regime, this will mean moving towards increasingly independent system operation in electricity and gas.

Some have suggested that we should move to a fully-fledged competitive regime now – with tenders run across the board for almost all new and replacement network services. However, this would pre-suppose a regulator or systems operator capable of managing a large portfolio of temporally and geographically interlocking investment contracts. In our view, the model is not practicable over the timeframe under discussion here; and even in the long-term the transaction costs and co-ordination risks among the different independent actors will need to be addressed, for example by the application of new technologies.

5. Wholesale energy markets



The British wholesale energy market allows trading of energy by suppliers, generators and shippers, both within Great Britain and across interconnectors linking us with Ireland and continental Europe. Consumers benefit when the wholesale market works effectively to ensure security of supply (i.e. a well-functioning market will minimise the costs of meeting energy needs). Such a market should also provide the fundamental signals that will support the energy transition and encourage private sector investment, i.e. through creating financial value for the contribution that storage and other forms of flexibility play in operating a future energy system with more low carbon and intermittent generation.

In order to discharge its duties on security of supply, Ofgem will continue to work closely with BEIS and the system operators in monitoring and, if necessary, intervening in the market, so that it continues to function effectively.

The electricity market is the vehicle through which incentives for low carbon generation and security of supply are paid. Therefore, there are two overarching aims within the wholesale energy market:

- to ensure that the wholesale markets are fair and effective; and
- in electricity, to ensure efficient incentives for low carbon generation and for security of supply, i.e. they deliver their goals at least cost to consumers.

Ensuring the wholesale market is fair and effective

The primary goal of regulating wholesale markets is to ensure they are fair and effective. Fair, in that participants can access the market on equal terms, and trade with confidence that others are not taking advantage of privileged information. Effective, in that the market matches buyers and sellers efficiently, facilitates risk management, and supports price discovery. Markets that are fair and effective are likely to be deep and liquid, enabling energy to be traded with minimal friction to the benefit of consumers.

Ofgem undertakes a number of activities with a view to making sure these markets work well. These include overseeing the rules, monitoring market activity and enforcing against market abuse. In particular, Ofgem is considering whether intervention is still needed to maintain liquidity in the electricity market and is working to ensure efficient cross-border trading arrangements after an EU exit.

Over time, Ofgem will examine if necessary reform the wholesale market to allow more effective ways to trade power locally – allowing more efficient use of energy and reducing the need to use the wider network.



Ensuring incentives are efficient

There are two major interventions in the electricity wholesale market – to increase low carbon generation (through 'contracts for difference') and to ensure secure supplies at all times (through the capacity market).

The overarching design for these incentives remains principally with BEIS, with some support from Ofgem in implementation. Concerns have been raised about the ability of the existing regime to deliver nuclear power and certain other technologies in a cost effective way. This is because of the longer term nature of nuclear power, financial risk in delivery, and the long lead time for payments under the existing low carbon contracts. Therefore, Ofgem is supporting BEIS in examining the efficiency and viability of funding low carbon power through a structure similar to our network regulation. This would also play a key role in achieving our priority to support decarbonisation at the lowest cost.

Equally, there may be wider infrastructure investments that would benefit from this approach (for example if very large heat networks were to develop in the future); so – over time – we will assess the viability of extending this approach to different parts of the market.

6. Scheme administration



Ofgem administers renewable energy and social programmes on behalf of Government. These schemes are worth over £7 billion a year. Our expertise lies in designing, setting up and delivering large-scale programmes in the sustainable energy sector, in fields as diverse as renewable heat, renewable electricity, energy efficiency and fuel poverty.

We work with energy companies, consumer groups and other stakeholders, including elected representatives, to make sure policy targets are met in the most economical and consumer conscious way possible.

Ofgem provides scheme administration services to government departments in Great Britain and Northern Ireland. Payments are reviewed from time to time. Schemes have a limited life, and their demands follow a life cycle, with heightened activity immediately prior to closure. Ofgem must manage the activity accordingly.

Both the customers and the provider of these services are public sector bodies (in Ofgem's case with a principal duty to promote the interests of current and future consumers), so that the public interest is paramount. In these circumstances, it is appropriate that our revenues cover efficient costs, at an agreed quality of service.

In performing these functions, we highlight the risks of the regulations, detecting and tackling unethical behaviour, fraud and non-compliance. We also suggest changes where we believe they are needed in order to ensure the schemes are being used for what they were intended and to protect the public purse.

7. Sustainable development



Ofgem's principal duty to protect present and future consumers expressly includes their interests in the reduction of greenhouse gases in the supply of gas and electricity to them; additionally we must have regard in performing our functions to the need to contribute to sustainable development. This chapter is focussed on reducing carbon and other emissions, but we recognise that consumers' interests in sustainable development is broader than this. For example, we have discussed vulnerability in a chapter above.

The last decade has seen major reductions in the carbon footprint of electricity generation with carbon emissions falling by over half during that period. Our view is that this will continue as prices of low carbon generation alternatives fall and the system adapts to make most efficient use of electricity they generate through flexibile solutions, such as storage and adaptation of consumer demand to minimise overall costs.

This change will impact on wider sectors in the economy. For example, as the take-up of electric vehicles increases, transport emissions will be reduced and flexible charging will allow consumers to benefit from lower overall costs. Increased electrification of heating and industrial energy use could further build on this trend. The use of district heating or the conversion to low carbon gas – through biogas and/or hydrogen – would substantially reduce carbon emissions from heating. With Government accepting the Committee on Climate Change's recommendation for a net zero carbon dioxide emissions target by 2050, there is an increasing focus on decarbonisation and particularly in the transport and heat sectors.

Traditionally, policy decisions relating to decarbonisation, including arrangements to support non-fossil fuel sources of generation, have been made by UK Government, with Scottish and Welsh governments setting their own decarbonisation targets. However, Ofgem has an important role in the way we administer government renewable and energy efficiency schemes and regulate the energy market in minimising the costs of the low-carbon transition.

Equally, change to the Government has already signalled that it wishes, over time, to move away from direct decision making in the energy market. The decisions over how we change the gas and electricity network and create markets for new flexible solutions will be fundamental in ensuring efficient low carbon energy use. Therefore, the role of Ofgem in assessing the trade-off between current and future consumers' interests in sustainability and in cheaper prices will come into greater prominence.

We already investigate the impact on sustainability of major policy decisions. For example, in our work on the allocation of fixed network costs in the targeted charging review, we calculated the impact of our proposed changes (designed to enhance efficiency over the whole value chain) on sustainability, and found them to have a positive effect. This assessment sat side-by-side with our estimation of their impact on prices for energy paid by different types of consumer.



However, in the new circumstances described above, we may have to take a more active role in building Great Britain's low carbon energy system – in the interests of future consumers.

This might involve:

- direct decision making to support the low carbon transition for example through ensuring that network price controls, new retail arrangements and network charging support the efficient rollout out of new technologies, such as electric cars and low carbon heating;
- efficiently administering a large part of the existing renewable generation and energy efficiency schemes;
- continuing to factor in statutory tests referred to above into all of our ongoing significant regulatory decisions and keeping how we do so under review. As a first step, Ofgem will review the sustainability guidance given to its teams to ensure that environmental impacts are robustly assessed, particularly in the light of the Government's ambition of net zero emissions by 2050; and
- taking steps to reduce our own environmental impact, showing leadership to the sector.

8. Working at Ofgem



Ofgem has about 800 staff across its three offices. Our work is demanding, requiring both technical skills and in many cases the capacity to balance numerous conflicting considerations. We have an annual staff turnover of about 25%. This is slightly higher than we would like, but we recognise that many of our staff have the desire and opportunity to experience working for a variety of organisations.

The annual staff survey reports a score of 61 on the overall engagement index. The two highest sub-elements are 'organisational objectives and purposes' (81) and 'my team' (83). The two lowest are 'pay and benefits' (27) and 'leadership and managing change' (45). We are determined over the period to raise these engagement scores, all of which are slightly below the Civil Service average.

As part of this ambition, the Board has asked the Executive to undertake a fundamental review of how Ofgem operates. This is also driven by the combination of increasingly tight budget constraints over the period of the current Spending Review and an increasing workload associated both with the redesign of regulation for the energy transition and additional activities which we have agreed with BEIS to do. We intend to respond to these developments not by working harder but by working smarter. Making these changes will make Ofgem a more effective organisation and deliver better value for money for the consumers we serve.

For over a year, Ofgem has been pursuing an 'agility' objective, supported by our Chief Operating Officer. The Secretary of State's above-noted November speech - via its reference to the need for energy regulation to be agile and responsive - gave further impetus to this.

Ofgem has traditionally worked like many other bureaucracies, with a hierarchical structure, formal lines of authority, and a fairly rigid division of labour among people with expert training in their fields. We have many large and well-established teams engaged in different areas of activity, making recommendations and producing written reports that move up and down a hierarchy. Often, when one task is completed, the same team moves onto the next project in the same area.

We now aspire to adopt a more agile regime, which is more project-based and less durable in structure, with teams forming and reforming more often, retaining professional specialisation where necessary and exhibiting multi-disciplinary ways of working. With a changing energy sector, we need to combine our existing expertise and specialisms with new skills such as data science.

We expect such agile teams to operate in a more decentralised way and with more autonomy, sharing knowledge and joint internal decision-making. (This will probably limit the size and span of activity of any given team.)

This will be supported by an ongoing redesign of our methods of gathering, receiving, quality-controlling, storing, sharing, analysing and presenting the data we use in economic regulation and scheme administration. The changes in approach set out above make our reliance on such data more acute. Far too much staff time is spent and wasted, on mechanical data-related tasks, which sometimes involve duplicated requests for information sent to other organisations. In order to achieve our goals, the



data function in Ofgem will need to play a much greater strategic role in changing working practices across the organisation.

The E-Serve directorate has been through a period of reform and restructure, and is now emerging in a position to execute its new, longer-term strategic approach to scheme administration and its wider role within Ofgem. In relation to that role, E-Serve already works collaboratively with teams across Ofgem, including in enforcement cases, shaping our response to vulnerability policy, market monitoring and the Supplier of Last Resort process.

E-Serve developed its recent strategy to reflect lessons learned in the recent past, including from the National Audit Office (& Public Accounts Committee hearing) and Northern Ireland Public Inquiry. This work will be ongoing.

Moving to a more responsive and decentralised way of working is intended to speed up delivery, to improve the quality of output, and to allow earlier abandonment of activities which are not progressing, so releasing these team members for more productive activities.

Working in this fashion is common in many other organisations and has been trialled successfully in a number of areas within Ofgem. It must be supported by senior leaders who embrace this way of working, by appropriate group and individual incentives, and by a more fluid and timely means of rostering employees.

It will necessarily change everyone's way of working, including that of Ofgem's Board and Senior Leadership Team, which must communicate a clear vision for the organisation, prioritise work decisively, and agree deliverable briefs with agile teams. The Board recognises that it will need to change its current ways of setting its agenda and conducting meetings. The Board will closely monitor progress on the 'agile' agenda.

Ofgem will do its job better the more we reflect and understand the public we serve. In March 2019 we adopted a diversity and inclusion strategy which includes setting stretching aspirational employment targets for under represented groups across the organisation. With respect to gender diversity, we have set the objective of equal numbers of female and male employees at all grades by 2025. The Ofgem Board is already equally balanced, but women are under-represented in the higher-paid positions.

The Ofgem gender pay gap increased from 6% in 2017 to 11.5% in 2018, which is still lower than many other public sector bodies and the wider energy sector. However, we expect it to narrow again in 2019, as we know that we have a more balanced workforce at senior levels, including a 50:50 split at the most senior levels and more male colleagues at entry-level grades than previous years. We remain determined to keep focussed on reducing any remaining gap.

In addition, we intend to achieve a minimum of **18%** Black, Asian and Minority Ethnic (BAME) representation across all pay grades (and the Board) by 2025, with at least half of these being women.

9 - Our interactions with other institutions



The agenda described above requires close collaboration with other bodies. Given the radical nature of the changes in prospect, and their requirement for new legislation, it is particularly important we work closely with BEIS. Accordingly, we are working with BEIS, via joint teams on a range of topics ranging from the reform of the retail market to the role of systems operation and code reform. In addition, the Chair and Chief Executive of Ofgem have regular meetings with the Minister for Energy.

We also interact regularly with other departments, with the Scottish and Welsh Governments, with other regulators through the UK Regulators Network, and with the National Cyber-Security Centre in our work as the joint competent authority (with BEIS) for cyber security. Ofgem engages with a number of European organisations and institutions; while the UK's relationship with the European Union is changing, we expect to continue the need to work with such organisations to help secure good outcomes for consumers from the GB energy market.

We recognise that energy policy is in many ways cross-cutting, with clear links to policy areas which are devolved to the Welsh and Scottish Governments – such as housing, transport, planning, decarbonisation targets, and Welsh Language Standards for energy suppliers. We will therefore continue to directly resource engagement with politicians and officials in the devolved administrations, to ensure mutual understanding of our respective priorities, and ensure their voice is heard in the ongoing development of our work programme.

We plan to continue our current practice of holding four of our ten annual Board meetings in locations in England, Scotland and Wales other than our Canary Wharf offices, and use these as opportunities to meet local firms, households, organisations, innovators and consumers of every kind, both large and small, to hear their views.

In both our regulatory and scheme administration work, we rely on, and are grateful for, numerous interactions with companies in the sector, including their responses to our consultation and other documents. We continue to take very seriously our obligation to be transparent, to give reasons for our decisions, and to signal our intentions in advance.

Consumer organisations are less well funded than energy companies, but we greatly value their detailed knowledge of the experience of all household energy consumers, and especially of vulnerable consumers.

We record the number and type of meetings between outside organisations and Ofgem's Board members and senior staff, using this data to ensure that we meet a balanced group of interested parties. We have concluded that, while we have been kept fully abreast of the views of companies in the sector, we do not at present keep similarly in touch with energy consumers of all types – households, micro-businesses, SMEs and large users – and their representatives. We will correct this over the period ahead, recognising that different stakeholders require or welcome different modes of engagement.

10 - Bringing it all together



This document covers a short to medium term period. It does not seek to engage with the long-term consequences of the energy transition, but to establish a clear direction of travel for the next 3-4 years. However, even this short period can only be navigated successfully if we make significant changes not only in what we do but also in how we do it. The start of this period will also see the appointment of a new Chief Executive, who will bring new perspectives to the role.

The Board has every confidence in the ability of Ofgem's staff to implement the measures described above. However, they impose new and heavy challenges, which we think can only be met by a major change in how we all work: greater agility and speed, more cross-team working and greater decentralisation. This will be difficult, but it has the potential to deliver a more satisfying work experience and make Ofgem a more effective organisation, better able to make a positive difference for consumers. It will require commitment by the senior leadership team, which must manage the change.

The Board itself is determined to change the nature of its own contribution, where possible away from the details of economic regulation and scheme administration, towards a more selective and strategic focus on the health of the organisation and on Ofgem's overall impact on providing benefits to our ultimate clients – who are all existing and future energy consumers. In doing this, we will be careful to ensure that in the Board taking a more strategic approach, we continue to appropriately execute our statutory duties.

Our intention is to publish more detailed guidance on how this strategy and our priorities for this period will drive the organisation and our work plan. We will shortly prepare such guidance, which we expect to replace the Regulatory Stances we published in 2016.

The Board will regularly review progress the organisation is making in delivering our priorities and in changing the way we work. Through our annual consumer impact report, we will regularly publish and measure our progress in protecting consumers and delivering the priorities set out in this document.

