



Department for  
Energy Security  
& Net Zero

# Strategy and Policy Statement for Energy Policy in Great Britain

Consultation

Closing date: 2 August 2023

May 2023



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# General information

## Why we are consulting

Government is seeking views on its proposed designation of a Strategy and Policy Statement for Energy Policy in Great Britain. This will be the first time that a Secretary of State has designated a strategy and policy statement for energy policy in Great Britain and government is interested in receiving views on its proposal for how this should look.

Ofgem and the Future System Operator (when established) will be required to have regard to the strategic priorities set out in this statement. Both authorities are vital in delivering government's strategic priorities for the energy sector. Since the establishment of the Future System Operator is still at an early stage and is subject to the passage and implementation of the Energy Bill that is currently before Parliament, we have kept references to the Future System Operator's specific roles and responsibilities at a high level in this version of the statement.

This statement may be of interest to any persons, groups or organisation with an interest in the energy system.

Feedback is being sought on the strategic priorities and policy outcomes set out in this strategy and policy statement for energy policy, and the roles and responsibilities of those involved in delivering these outcomes.

## Consultation details

**Issued:** 10 May 2023

**Respond by:** 2 August 2023

**Enquiries to:**

Ofgem Sponsorship Team  
Department for Energy Security and Net Zero  
Floor 3, Abbey  
1 Victoria Street  
London  
SW1H 0ET

Email: [strategyandpolicystatement@beis.gov.uk](mailto:strategyandpolicystatement@beis.gov.uk)

**Consultation reference:** SPS Consultation

**Audiences:** Energy suppliers, generators, transmission owners, distribution networks, consumer representatives and any other organisations with a direct interest in the energy system.

**Territorial extent:** Great Britain

## How to respond

If possible, we would prefer to receive responses online.

**Respond online at:** [beisgovuk.citizenspace.com/energy-security/energy-strategy-and-policy-statement-gb](https://beisgovuk.citizenspace.com/energy-security/energy-strategy-and-policy-statement-gb)

or

**Email to:** [strategyandpolicystatement@beis.gov.uk](mailto:strategyandpolicystatement@beis.gov.uk)

**Write to:**

Ofgem Sponsorship Team  
Department for Energy Security and Net Zero  
Floor 3, Abbey  
1 Victoria Street  
London  
SW1H 0EU

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](https://www.gov.uk). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

## Quality assurance

This consultation has been carried out in accordance with government's [consultation principles](#).

## Strategy and Policy Statement for Energy Policy in Great Britain

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If you have any complaints about the way this consultation has been conducted, please email: [beis.bru@beis.gov.uk](mailto:beis.bru@beis.gov.uk).

# Consultation questions

- 1. Does the strategy and policy statement identify the most important strategic priorities and policy outcomes for government in formulating policy for the energy sector in Great Britain? If not, please provide details of the priorities that you think should be included.**
- 2. Does the strategy and policy statement effectively set out the role of Ofgem in supporting government to deliver its priorities? If not, please identify where these expectations could be made clearer.**
- 3. Given the Future System Operator does not exist yet but will need to have regard to the strategy and policy statement once it does, do you consider that we have effectively reflected the Future System Operator's role in this document? If not, please identify where these expectations could be made clearer.**

# Introduction

The power to designate a Strategy and Policy Statement (SPS) for energy policy in Great Britain was introduced by the Energy Act 2013 and this is the first time that this power is proposed to be exercised.

As provided for in section 131(2) of the Energy Act 2013, this statement sets out:

- the strategic priorities, and other main considerations, of His Majesty's government in formulating its energy policy for Great Britain (“strategic priorities”),
- the particular outcomes to be achieved as a result of the implementation of that policy (“policy outcomes”), and
- the roles and responsibilities of persons who are involved in implementing that policy or who have other functions that are affected by it.

Government has set out the wider context of its strategic priorities for the energy sector in several papers over the years, including the [Energy White Paper](#) (2020), [Ten Point Plan for a Green Industrial Revolution](#) (2020), [Net Zero Strategy](#) (2021), [British Energy Security Strategy](#) (2022), [Energy Security Plan](#) (2023) and [Net Zero Growth Plan](#) (2023). These publications detail government’s aims of reaching its net zero targets<sup>1</sup>, driving economic growth, reducing dependence on imported fossil fuels for heating and power, enhancing energy security, promoting infrastructure investment, creating green jobs, levelling up the country, protecting and improving the environment, and ensuring bills are affordable.

This statement complements these publications, providing guidance to the energy sector on the actions and decisions that are needed to deliver government’s policy goals and places emphasis on where government expects a shift in the energy industry’s strategic direction.

As the independent regulator for Great Britain, Ofgem is free to determine how it should make decisions. However, Ofgem has a duty to have regard to the strategic priorities set out in this statement when carrying out its regulatory functions. Both the Secretary of State and Ofgem must carry out their respective functions in a manner that they consider best calculated to further the delivery of the policy outcomes in this statement. This duty is not extended to Ofgem’s role in delivering social and environmental schemes.

The Future System Operator (FSO) is currently being established as part of the Energy Bill and, similarly to Ofgem, will have a duty to have regard to the strategic priorities set out in this statement when carrying out its functions. Given the FSO is currently being brought into existence and the new FSO roles are still in development, it will take time to reach full maturity, and the scope of the new roles may change even after the designation of the SPS. We have therefore kept references to the FSO’s roles and responsibilities at a higher level in this statement and instead plan to reflect how best to cover the FSO in its substantive role once it is established. Government has the power to review and revise the SPS in preparation for, or

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<sup>1</sup> In 2019, the UK adopted a legally binding target to reach net zero greenhouse gas emissions by 2050 (Climate Change Act 2008). Scotland and Wales have since separately established their own legally binding targets of reaching net zero by 2045 (Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 and 2050 (Environment (Wales) Act 2016), respectively.



in connection with, the FSO's designation and will therefore consider in future when it is appropriate to do so.

Ofgem and the FSO play important roles in the energy system and in the wider economy. Government expects private sector investment of around £100 billion in the in the energy sector in the period to 2030, with the expectation that this will support up to 480,000 jobs in 2030. Through the effective pursuit of their statutory objectives, undertaken with reference to this SPS, Ofgem and the FSO will help grow the economy, facilitate the net zero transition, and keep bills down for energy consumers including through maintaining a secure supply of energy.

This statement does not introduce new roles or duties for bodies in the sector. It does not replace or override Ofgem's principal objective or other duties Ofgem has. Neither does it replace the FSO's objectives and duties set out in the Energy Bill.

## Strategic Priorities

Government has identified the following strategic priority areas for energy policy in Great Britain for the purposes of this statement:

### **Enabling Clean Energy and Net Zero Infrastructure**

Driving the net zero transition to increase and diversify the supply of energy; the transition to net zero compatible alternatives from unabated natural gas is planned and operated in a coherent way; network infrastructure delivered at pace and scale to handle increased capacity as electrification grows; competitive and effective markets; regulation which facilitates the anticipatory investment required in clean technology and infrastructure; and seize the economic opportunities of the net zero transition, boosting growth and innovation in green industries.

### **Ensuring Energy Security and Protecting Consumers**

An energy system which is secure and resilient, including from supply shocks and external changes in the international environment; and energy wholesale markets that are competitive, transparent, and liquid. An energy system that provides protection for consumers, with Ofgem using the full range of levers at its disposal including its compliance and enforcement powers; and a retail energy market that works better for consumers.

### **Ensuring the Energy System is fit for the Future**

Energy market design that enables Great Britain to strengthen energy security and meet our decarbonisation targets; delivers the most cost-effective system for consumers; and supports government's ambition for Britain to have among the lowest wholesale electricity prices in Europe by 2035 and drive economic growth in the longer term. Coordinated national and local electricity markets which are open to all technologies of all sizes and unlock the full benefits of low carbon flexibility to best meet our net zero targets; economic and efficient digital infrastructure which enables a smart, digital and secure energy system; and effective governance of the energy system during the transition to net zero.

## The Legislative Framework

Part 5 of the Energy Act 2013 (sections 131-138) sets out the legislative framework for the Strategy and Policy Statement (SPS). The SPS is intended to replace the previous Social and Environmental Guidance published in 2011 pursuant to section 4AB(4) of the Gas Act 1986 and section 3B(4) of the Electricity Act 1989.

Under section 131, the Secretary of State may designate a statement of government's strategic priorities in Great Britain relating to the energy sector. Section 131(2) prescribes the contents of the SPS as: the strategic priorities, and other main considerations, of His Majesty's government in formulating its energy policy for Great Britain ("strategic priorities"), the particular outcomes to be achieved as a result of the implementation of that policy ("policy outcomes"), and the roles and responsibilities of persons (whether the Secretary of State, the Authority or other persons) who are involved in implementing that policy or who have other functions that are affected by it.

Section 132 states that Ofgem must have regard to the strategic priorities in the SPS when carrying out its regulatory functions (Part 1 of Gas Act 1986 and Electricity Act 1989) and the Secretary of State and Ofgem must carry out their regulatory functions in a manner which is best calculated to further the delivery of the policy outcomes, subject to the application of the Ofgem's principal objective. In accordance with section 132(3), the duties imposed by section 132(1) and (2) do not affect the obligation of Ofgem or the Secretary of State to perform or comply with any other duty or requirement.

Government has proposed to extend the existing SPS framework to the Future System Operator (FSO). The Energy Bill would create a duty for the 'Independent System Operator and Planner (ISOP)' (as the FSO is described in the Bill) to have regard to the SPS. The Energy Bill states that the ISOP must notify the Secretary of State if, at any point, it thinks that a policy outcome in the SPS is not realistically achievable. The notice must include the reasons for the conclusion and what (if anything) the ISOP is doing or proposing to do to further delivery of the policy outcome.

Under section 135 of the Energy Act 2013, before designating the SPS, the Secretary of State must consult Ofgem, Scottish Ministers and Welsh Ministers on a draft statement, and then issue the revised draft for the purposes of further consultation to the required consultees and to such other persons as the Secretary of State considers appropriate. The statement must be approved by a resolution of each House of Parliament before the Secretary of State may designate it as the SPS. The Secretary of State will be required to consult with the FSO on future iterations of the SPS by clause 116(10) of the Energy Bill.

Pursuant to section 134, the statement must be reviewed as soon as reasonably practicable after five-years of its designation. However, under section 134(4) the statement may be reviewed prior to the five-year period elapsing only if there has been: a general election; a significant change in the Government's energy policy which was not anticipated and would have led to the statement being materially different; Ofgem has given notice that a policy outcome contained in the statement is not realistically achievable; or the Parliamentary approval requirement in relation to an amended statement was not met on the last review.

Pursuant to section 137, as soon as practicable after the designation of the statement, Ofgem must publish a document setting out: the strategy Ofgem intends to adopt for the purposes of furthering the delivery of the policy outcomes in the statement; the things Ofgem proposes to do in implementing that strategy (including when); and the ways in which Ofgem has had

regard to the strategic priorities contained in the statement. Ofgem must also report on the required information in its forward work programme for each financial year and include a review in their annual report of the ways it has carried out its duties under sections 132(1) and (2) and the extent to which it has done the things set out in its forward work programme or other document in relation to the statement.

# Energy System: Roles and Responsibilities

This sets out the roles and responsibilities within the existing policy framework of government, Ofgem and the Future System Operator as the bodies that have (or will have, subject to the Energy Bill) a duty to have regard to the strategic priorities in this statement. These roles and responsibilities may change or evolve over the course of this statement.

## Government

Government is responsible for setting the policy and regulatory framework for the gas and electricity sectors in Great Britain. The Department for Energy Security and Net Zero is the sponsor department for Ofgem. Ofgem's relationship with the UK Government through the Secretary of State for the Department for Energy Security and Net Zero is primarily set out in Part 1 of the Utilities Act 2000. HM Treasury has principal oversight of Ofgem's finances.

Certain functions in the energy sector are reserved for the Secretary of State, including defining the extent of the regulated industry by deciding on licence exemptions, and appointing members of the Gas and Electricity Markets Authority ('the Authority'). The Secretary of State is subject to the same principal objective and general duties as Ofgem (see below) in respect of carrying out most of its statutory functions. The Secretary of State is also a statutory consultee with respect to certain powers of Ofgem to amend licence conditions and some decisions cannot be implemented if the Secretary of State objects. In addition, the Secretary of State's consent is required before the Authority can make particular regulations.

The Secretary of State will be the sole shareholder of the FSO, with responsibilities of the parties involved in the relationship between Government and the FSO set out in the FSO's Framework Agreement.

Some aspects of energy policy fall within the legislative competence of the Scottish Parliament and government and the Senedd / Welsh Ministers. However, the policy areas that fall within Ofgem's remit are reserved to the UK Parliament and Ministers (see Schedule 5 to the Scotland Act 1998 and Schedule 7A to the Government of Wales Act 2006).

## Ofgem

Ofgem, the Office of Gas and Electricity Markets, is the non-ministerial government department that supports the Authority. The Authority is established as the independent economic regulator of gas and electricity markets in England, Scotland and Wales under the Utilities Act 2000. We use "Ofgem" in this document as a short-hand way of referring to the Authority as well as Ofgem itself. Ofgem takes its regulatory decisions independently and within its regulatory powers it is free to decide on the most appropriate regulatory approach to a particular issue. Ofgem is directly accountable to Parliament for the performance of its functions and duties. This section summarises Ofgem's existing statutory duties.

The Authority determines strategy, sets policy priorities, and makes decisions on a wide range of regulatory matters, including price controls and enforcement. The Authority's powers and duties are provided for in statute: these include, but are not limited to, the Gas Act 1986, Electricity Act 1989 and Utilities Act 2000. As set out in statute, the Authority's principal

objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are 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.

The Authority must carry out its functions in the manner which it considers best calculated to further the principal objective, wherever appropriate by promoting effective competition within the electricity and gas sectors. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority must consider the extent to which the interests of consumers would be protected by that manner of carrying out those functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests. The Authority must also, in this context have regard to the need to secure that all reasonable demands for electricity and gas are met; the need to secure that licensees can finance their regulated activities, and the need to contribute to the achievement of sustainable development. Furthermore, it must have regard to the interests of vulnerable individuals, including those who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.

Ofgem has powers under consumer protection legislation, including the Competition Act 1998, Consumer Rights Act 2015 and the Business Protection from Misleading Marketing Regulations 2008, to investigate and enforce against breaches of consumer protection law.

Ofgem will also be the regulator of the FSO. It will be responsible for approving its business plan through the price control process and delivering performance management.

## Future System Operator (FSO)

Government has introduced legislation, as part of the Energy Bill, to establish a new, publicly owned Future System Operator<sup>2</sup> (referred to as the Independent System Operator and Planner or ISOP in legislation).

Our energy landscape is becoming increasingly integrated and complex in our drive to net zero. This calls for a central body that is able to weigh up and advise on the impacts and trade-offs across vectors and plan our energy system from a more strategic, whole system perspective. This is why we are establishing the FSO at the heart of the energy system. The FSO will be set up initially with all the existing functions of the electricity system operator (ESO) and longer-term strategic gas planning and forecasting functions, with the intention that

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<sup>2</sup> This is the name currently given to the body that will be designated as the Independent System Operator and Planner (ISOP) under Part 4 of the Energy Bill that was introduced into Parliament in July 2022. References to the FSO in this document should be read as referring to that body. Part 4 of the Energy Bill provides for the ISOP to have duties in respect of any Strategy and Policy Statement (SPS) designated under the Energy Act 2013. Accordingly, this SPS includes references to the ISOP and the FSO (meaning the same body in either case). However, this Strategy and Policy Statement (SPS) may be designated before any body is designated as the ISOP, and although the ISOP, when designated, will take on some functions that already exist (e.g., the role of electricity transmission system operator), many of its responsibilities (including those related to the SPS) will be completely new. Until the Energy Bill receives Royal Assent (in a form containing its current provisions about the SPS) and an ISOP is designated, no body (including any entity that government may indicate as likely to be designated as ISOP) is subject to any of the duties assigned to the ISOP in respect of the SPS. However, as and when the Energy Bill receives Royal Assent and an ISOP is designated, the SPS will apply to the FSO in the way envisaged by the legislation.

it will evolve into a body that has the capability and capacity to take a fully whole system perspective when planning the network and undertaking its roles.

As set out in the Energy Bill, the FSO will be required to carry out its functions in the way that it considers is best calculated to promote the objective of ensuring security of gas and electricity supply, meeting our statutory decarbonisation targets and promoting a coordinated, efficient and economical energy system for electricity and gas.

We set out below an overview of the core roles, responsibilities and statutory duties of the FSO that will enable it to meet its statutory objectives. We have listed this under the relevant strategic priorities set out in this statement for ease of reference. Given the FSO has not yet been brought into existence and new FSO roles are still in development, this is not meant to be an exhaustive list or description and may change or evolve over the course of this statement.

### **Enabling Clean Energy and Net Zero Infrastructure**

*Economically efficient and flexible system:* As part of ensuring a more flexible, coordinated and economically efficient energy system that meets our decarbonisation targets, the FSO will need to take a strategic approach to network planning that is able to deliver investment ahead of need. When in place, this will initially be delivered via a [centralised strategic network plan](#) for electricity transmission onshore and offshore, building on ESO's current role in holistic network design. This should include early consideration of the deliverability, economic cost and environmental and social impacts. As part of this, the FSO should also be considering opportunities to shift and manage demand through smart solutions, such as electricity storage and demand side response.

*Whole system impacts:* FSO should build up capability to take a whole system view of network planning, design and markets across electricity, natural gas and hydrogen, which also considers the system impacts of other emerging and innovative technologies like carbon capture usage and storage (CCUS). It should be analysing problems and find solutions in a way that cuts across traditional sectoral siloes, looking across vectors and end-to-end (i.e. offshore and onshore, from generation or source across transmission and distribution through to demand). This would be underpinned by its statutory duty to have regard to whole system impacts, its efficiency and economy objective and its duty to keep under review developments in the energy sector that may be relevant to the carrying out of its functions. This will enable the FSO to provide independent recommendations from a whole system perspective to Ofgem, and advice to government to inform key policy decisions needed to meet net zero. *Competition and innovation:* Subject to the Secretary of State's discretion, we expect that the FSO will play a role in being the tender body for onshore electricity network competition, which will be supported by the FSO's statutory duty to have regard to the need to facilitate competition. This should be delivered at scale and pace to meet decarbonisation targets in the most cost-effective way. The FSO will also have a statutory duty to have regard to the desirability to facilitate innovation within itself and in the wider sector, where it should be seeking to drive effective change across the energy system.

### **Ensuring Energy Security and Protecting Consumers**

*Security of supply and resilience:* Security of supply and resilience of infrastructure will be a high priority for the FSO when carrying out its functions and to meet its security of supply objective. In electricity this includes continuing ESO's roles in maintaining real-time operation and balancing of the electricity system and delivery of the Capacity Market, as well as supporting government's Review of Electricity Market Arrangements (REMA). The FSO will also adopt a whole energy system coordination role for improving the security and resilience of

gas and electricity systems and undertake assessment of medium range gas supply security, as set out in the [Energy Security Plan](#) (2023).

*Consumer impacts:* The FSO will have a statutory duty to have regard to how the actions of energy sector participants (including themselves) impact or may likely impact current and future consumers, and vice versa. As part of this duty, the FSO should consider the extent to which energy sector participants are providing the kinds of products and services that consumers want, and the effect of current and anticipated consumer behaviour on the development and functioning of markets for energy products and services. Increasingly, moving to net zero will depend on the choices made by consumers as well as industry, and the FSO should seek to understand how the behaviours and preferences of each party influences the other, to ensure the energy system is flexible to meet the needs of users and the end consumer in Great Britain.

### **Ensuring Energy System is Fit for the Future**

*Flexible and responsive markets:* The FSO should be looking to support the delivery of market developments through a whole system lens, engaging with industry participants and recommending changes across electricity and gas that support effective market arrangements for the system. We expect the FSO to be looking to drive competitive, coordinated, and effective markets which are open to all flexibility technologies of all sizes. *Digitalisation:* We expect the FSO to be a data-led organisation, with a strong digital and IT systems capability and lead by example in improving sectoral energy data practices that are integral to the well-coordinated and cost-effective delivery of net zero. This will also be supported by its duty to have regard to the desirability to facilitate innovation, and its power to request information from licensees and other relevant parties.

### **Cross-cutting**

*Advice:* The FSO will have a statutory duty to provide independent advice, analysis and information to Ofgem and government, when requested, in connection with the FSO's functions, duties and objectives. The purpose of this is to enable government and Ofgem to draw on the specific expertise of the FSO and allow policy decisions to be based on robust evidence, with the FSO's independent consideration of whole system network impacts and requirements. As part of this role, we expect the FSO to be adaptable to respond to these requests for advice, and flexibly react and intelligently engage with government and Ofgem to actively shape the key decisions that will determine the energy system of the future.

The FSO's roles will continue to evolve as it builds up capability to take on this wider whole system remit, and therefore we expect the FSO to be prepared and adaptable to take on new roles in future.

The FSO will be set up to have operational independence from government and will be regulated by Ofgem. Modifications will be needed to industry arrangements, including codes and licences, to reflect the establishment of the FSO, which is subject to and will take place following the passing of the relevant legislation. Depending on a number of factors, including timings of the Energy Bill and delivery by key parties, our aim is for the FSO to be operational in 2024.

# Section One: Enabling Clean Energy and Net Zero Infrastructure

## Government's Strategic Priorities are:

- Network infrastructure is reliable, resilient, sustainable and appropriately connected to other markets.
- Electricity network infrastructure is delivered at scale and pace, ahead of need, to meet the demands of a decarbonised energy system as electrification grows, while controlling system costs by facilitating a smart, flexible and digitalised energy system.
- Driving the net zero transition by achieving government targets for renewable and low carbon deployment, innovation and uptake of clean technologies, and providing opportunities to increase energy efficiency.
- The transition to net zero alternatives from natural gas is planned and operated in a coherent way, with consideration to security of supply and costs for consumers, enabling necessary investment and promoting the move to the most cost-effective low carbon options wherever possible.
- Competitive and effective markets and regulation that facilitate the anticipatory investment required in innovation, clean technologies, and infrastructure to meet government's net zero targets while ensuring an appropriate balance between economic, environmental, and social costs, and addressing undue barriers to entry, growth and innovation.
- Ensuring the benefits of investment in clean energy and net zero infrastructure are felt across the UK, from emissions reduction to economic development and job creation.

## Government's Policy Outcomes are:

- Network regulation that enables the accelerated delivery, ahead of need, of network infrastructure to accommodate rapidly renewable generation capacity and demand from low-carbon technologies.
- As outlined in the British Energy Security Strategy, dramatically reduce timelines for delivering strategic onshore transmission network infrastructure and halve the end-to-end process by the mid-2020s.
- Gas networks that are prepared for a transition to a low carbon future and the feasibility and costs associated with replacing natural gas with hydrogen in the gas grid are assessed.
- Greater visibility of network data to inform decisions by both network operators, consumers, and drive innovations.
- Significantly increased uptake of low carbon heating by 2035, with the ambition that all new installations will be net zero compatible.



- For heat networks, enforcement of: carbon emission limits, evidence of compliance with technical standards on the design and build of heat networks, consumer protections, and a licensing regime for heat network developers.
- Development and implementation of an effective regulatory framework for carbon capture, usage and storage (CCUS) that enables a regulated rate of return to incentivise investor confidence and protects the interests of the relevant infrastructure users.
- Sustainable funding models for innovation that ensure investment through private finance does not distort the market.
- Barriers to multi-purpose interconnectors and other hybrid or novel assets are removed, and interconnectors operate as efficiently as possible.
- Strategic network plans take a whole system approach, including early consideration of the deliverability, economic cost, and environmental and social impacts.
- The flexibility of demand and system benefits provided by different low-carbon energy technologies can be sufficiently monetised by the providers of that flexibility.
- Significant and urgent reform of the connections regime so that new generation and demand projects critical to net zero can connect to electricity networks in a cost-effective and timely manner and in way that meets the needs of connection customers and the electricity system as a whole.

## Increased Network Capacity for Low Carbon Supply and Demand

The electricity and gas transmission and distribution networks need to be transformed to meet the demands of a decarbonised energy system and to meet government's ambitions for low-carbon and renewable energy generation. The growth of low-carbon electricity generation will need to accelerate significantly. The mass uptake of electric vehicles and heat pumps (both for individual dwellings and in heat networks) will create significant new demands for power. Network capacity will therefore need to adapt and expand ahead of need. Such a significant transformation requires a new approach to network development including: the accelerated rollout of electricity transmission and distribution networks; halving the end-to-end process for onshore transmission network infrastructure by the mid-2020s; reforms to ensure cost effective and timely connections; the adoption of flexible and whole systems solutions; and enabling strategic and anticipatory investment. These are likely to require appropriate adjustments to Ofgem's regulatory framework.

As both electricity demand and the intermittency of generation increases, Ofgem and ESO/FSO plan to work together to consider opportunities to shift and reduce demand through energy efficiency and smart solutions such as energy storage, demand side response. Flexibility should be prioritised in the management of network use, including resolving network constraints.

Government and Ofgem will work with the ESO/FSO to ensure a regulatory environment that delivers investment ahead of need in the electricity, gas and future hydrogen networks, while ensuring that consumer costs are proportionate, including taking into account environmental and social impacts. In undertaking its statutory duty to protect consumers, Ofgem should consider the cost to consumers of delays to infrastructure delivery and the impact of disruption

by multiple increases in network capacity over time as opposed to a single significant strategic upgrade. To facilitate strategic investment and achieve the necessary acceleration in network deployment, Ofgem should significantly expedite the regulatory approvals process for strategic network infrastructure, as it did in its December 2022 decision on Accelerating Strategic Transmission Investment. Ofgem will have a role in enabling Transmission Operators to deliver community benefits to communities close to electricity network infrastructure, by considering the appropriate balance between adequate provision of benefits and affordability for consumers.

Ofgem will also be responsible for taking steps to remove regulatory barriers to multi-purpose interconnectors (MPIs) and other hybrid or novel assets and to work closely with the system operator and industry to ensure domestic and cross-border market arrangements maximise the benefits of interconnection and facilitate their efficient use. To address the absence of a legal framework for multi-purpose interconnectors, government will bring forward a licence for the operation of an MPI, through the Energy Bill.

Additionally, Ofgem should work with ESO/FSO, industry partners and government to urgently address barriers to the efficient and timely connection of new low carbon generation and demand projects critical for net zero to the electricity network. This includes accelerating and significantly reforming the connections process and acting to address current delays, ensuring that connection costs are proportionate and ensuring strong customer service and consistency across network companies.

In its role of approving the design of network tariffs, Ofgem will need to balance several competing principles which sit alongside the key principle of cost-reflective network charges:

- **Enabling net zero:** network charges may have a significant effect on how net zero is delivered, including through any locational price signals that are sent. Alongside this, charging design should take due account of other relevant system factors that influence location. Supporting arrangements should also continue to recognise the relative value, benefits and disbenefits of all technologies connecting – or already connected – to the electricity network.
- **Fairness:** including that there should be no undue discrimination between network users; earlier adopters of key low carbon technologies should not be unduly penalised through network charging arrangements; network users should not be able to unduly avoid network charges; and that consumers in vulnerable situations should receive an adequate level of protection.
- **Predictability:** the evolution of the energy system means that network charges will inevitably need to evolve over time, but charges should be clear to stakeholders and as predictable as possible.
- **Transparency:** the level of network charge and the possible impact of any proposed reforms should be transparent and accessible to all relevant parties.

## Investment, Innovation and Competition

As set out in the [Net Zero Growth Plan](#), investment is the key to delivering our energy security, carbon targets and seizing the economic benefits of the transition to net zero. Government will ensure that the legal and institutional framework exists which can promote investment and competition and have the best chance of delivering a net zero energy system which is resilient,

at lowest cost and with security of supply. Ofgem shall be responsible for promoting competition, wherever appropriate, and ensuring there is fair competition between existing players in the energy sector and new entrants. ESO should prepare to undertake the role of developing the commercial model and tender process for early competition, with a view that this role should transition to the FSO. Ofgem will need to balance the need to drive competition with other factors such as the need for accelerated deployment of infrastructure, the benefits of stable, predictable, and transparent regulatory arrangements, supply chain challenges and the need to support whole market growth and the impact of costs and barriers on all consumers.

Ofgem's role will be to encourage cost-effective anticipatory investment, facilitated by the network price control and charging regimes, in the low carbon infrastructure and technology needed to deliver net zero and take an active role in facilitating investment and ensuring it is efficiently spent. Ofgem should consider the impact of regulatory decisions on market participants' ability to deliver large infrastructure projects required to achieve net zero, ensuring their ability to procure necessary components in an economically efficient fashion.

New technologies and innovative business models will be crucial for meeting net zero, and innovation requires the right market, policy, and regulatory environment to be successful. Alongside competitive markets, government is working to ensure effective policy support and stability to encourage innovation. Ofgem has a key role as the sector regulator, ensuring that regulation is proportionate and allows for key innovations that will contribute to net zero and drive down costs for consumers.

## The Role of Gas and Hydrogen

Through the transitory period of decarbonising our economy, we will continue to rely on unabated natural gas. Alongside clean technologies, unabated natural gas can provide a flexible and reliable source of energy to provide peaking generation, ensuring security of supply whilst we develop and deploy low carbon alternatives that can replicate its role in the electricity system. Government will work with Ofgem to prevent distortions in the gas market and ensure the right price signals are in place to enable a least-cost transition from natural gas to net zero.

As unabated natural gas is phased out, renewable and low carbon sources of gas, including hydrogen, will be critical alongside electricity to provide greener energy for industry, power, transport and potentially home heating. An integrated hydrogen network can link producers and consumers and provide resilience, energy security and system balancing by storing energy, including at scale and seasonally. A well-developed network of transport and storage infrastructure is considered to be a central component of the UK hydrogen economy and a key enabler for government's ambition of up to 10GW of low carbon hydrogen production capacity by 2030, subject to affordability and value for money. As set out in the [UK Hydrogen Strategy](#) 2020s roadmap, government envisages hydrogen networks and storage to develop within clusters and then on a regional and/or national scale from the late 2020s into the mid-2030s onwards, serving an increasing number and variety of end users.

Cross-cutting strategic planning for hydrogen infrastructure will be beneficial to ensure that the whole energy system benefits are realised. Given government's commitment to developing the hydrogen economy at pace, and that Ofgem has previously allowed some feasibility studies for hydrogen transport infrastructure to be supported, government will continue to work collaboratively with Ofgem to consider what work needs to happen now and what appropriate funding mechanisms could be used to support the development of hydrogen network

infrastructure. Ofgem shall have a fundamental role, working closely with FSO, industry partners and government, in addressing any barriers which prevent the development of this hydrogen infrastructure in the near-term and helping ensure a suitable framework is in place to ensure this growth can happen, acknowledging government's aim to design new transport and storage business models by 2025.

As set out in the [Ten Point Plan for a Green Industrial Revolution](#) (2020), government will support industry to deliver a low carbon hydrogen neighbourhood trial by 2024, a village scale trial by 2025 and a potential hydrogen heated town before the end of the decade. The local trials and planning work, together with the results of a wider research and development and testing programme, will enable strategic decisions in 2026 on the role of hydrogen for heat decarbonisation and whether to proceed with a hydrogen heated town. Enabling early hydrogen network projects within and potentially beyond industrial clusters could contribute to the evidence base that will inform decisions in 2026 on the role of hydrogen for domestic heating.

Ofgem has and shall continue to play an important role working with government and industry to ensure the necessary work in the gas system is identified and planned effectively and efficiently. Innovation funding allowed by Ofgem under the regulatory arrangements for networks has and will continue to be an important enabler of the necessary research and development, including a pioneering programme of community trials of hydrogen heating. Ofgem's continuing contribution to government policy development on hydrogen infrastructure, including market and regulatory frameworks, will be important in supporting hydrogen's role in reducing the UK's carbon emissions across multiple sectors.

Government will continue to work with Ofgem, Health and Safety Executive, the Devolved Administrations, the gas networks, and wider industry to understand the case for hydrogen blending and help build the necessary evidence-base to determine whether blending meets the required safety standards, is feasible, and represents value for money.

## Heat Pumps and Heat Networks

Heat pumps are a technology that we will need in any heat decarbonisation pathway, and Ofgem shall have an important role in helping government deliver the ambitions set out in the [Heat and Buildings Strategy](#) (2021). Ofgem is responsible for ensuring regulatory conditions support the heat pump market to grow and could play an important role in facilitating other key policies on low carbon heat.

Heat networks are a crucial aspect of the path towards decarbonising heat and reducing our greenhouse gas emissions to net zero by 2050. In the right circumstances, they can reduce bills, support local regeneration and can be a cost-effective way of reducing carbon emissions from heating. Government has announced that it intends to appoint Ofgem as the heat networks regulator across Great Britain via the Energy Bill. Ofgem's role will include enforcing consumer protection rules under the regulatory framework so that heat network consumers receive a fair price, a reliable supply of heat, and transparency of information on their heat supply and bills. Ofgem's role will also include supporting and advising government on any heat pump and hydrogen rollout from a system perspective and having regard to any relevant developments in hydrogen when undertaking its functions with network planning.

The regulatory framework will also facilitate market growth by providing heat network developers with access to powers equivalent to other utilities, such as gas and electricity,

including powers to excavate roadways. It will ultimately introduce technical standards and carbon emissions limits on heat networks to deliver more efficient, low carbon heat networks. Ofgem will be responsible for monitoring compliance and will have powers to take enforcement action where necessary.

## Carbon Capture, Usage and Storage (CCUS)

Carbon dioxide transport and storage networks will be the enabling infrastructure for carbon capture and storage from a range of potential sources, including power plants, industrial facilities, low carbon hydrogen production, carbon capture from energy from waste, carbon capture from bioenergy and potentially direct air capture.

Government is committed to supporting the deployment of four CCUS clusters by 2030. CCUS can play a key role in meeting the UK's 2050 net zero target and supporting the low-carbon economic transformation of our industrial regions, creating new high value jobs and levelling up the economy. The Climate Change Committee have described CCUS as a 'necessity, not an option' for the transition to net zero.

The Energy Bill establishes a new economic regulation and licensing framework for carbon dioxide transport and storage, designed to attract private finance and remove market barriers to investment, providing long-term revenue certainty needed to establish and scale-up the first-of-a kind carbon dioxide transport and storage networks across the UK. The Bill establishes Ofgem as the economic regulator for carbon dioxide transport and storage, with statutory objectives and legal powers to regulate the economic licensing regime. Users of the carbon dioxide transport and storage networks are expected to include users from across the energy sector, but also other sectors, in particular industrial facilities. Given this broader scope, the Bill provides for a CCUS Strategy and Policy Statement to be designated by the Secretary of State, which must take into account any strategy and policy statement designated under section 131 of the Energy Act 2013 in respect of energy policy. Government will give consideration to a CCUS Strategy and Policy Statement in due course, once the legislative provisions are in force and subject to the procedural requirements as set out in the Bill.

## Nuclear

Pursuant to the Nuclear Energy (Financing) Act 2022, once a nuclear company has been designated by Secretary of State, the Secretary of State is able to modify the company's electricity generation licence to include Regulated Asset Base (RAB) terms and conditions (RAB licence), subject to consultation and all relevant approvals being met. This would entitle the company to a regulated revenue channel in exchange for the design, construction, commissioning, and operation of the nuclear project, funded in part by levies on all licensed electricity suppliers in Great Britain (who will presumably pass those costs to their consumers). The allowed revenue that the company receives in respect of these activities will be determined by Ofgem in accordance with the conditions of the RAB licence.

In performing its role, Ofgem will be required to act in accordance with its existing statutory duties, including its principal objective to protect the interests of both current and future consumers. This is the first time that Ofgem will oversee a RAB model for a generation asset, but we recognise that Ofgem has a strong and lengthy track record of predictable and consistent decision making in respect of utilities regulation.

## Section Two: Ensuring Energy Security and Protecting Consumers

### Government's Strategic Priorities are:

- An energy system which is secure and resilient including from supply shocks and external changes in the international environment.
- An energy system that provides protection for both domestic and non-domestic consumers.
- A retail market that works better for consumers, is more resilient and investable, and supports the electrification and wider transformation of the energy system in the most cost-effective way.
- Energy wholesale markets that are competitive, transparent, and liquid.

### Government's Policy Outcomes are:

- Security and resilience of the gas and electricity systems against the full range of threats and hazards facing the sector now and in the future.
- Restored consumer confidence in the energy retail market and high standards of customer service in the interactions that consumers have with retail energy market participants.
- Increased financial resilience of energy supply market participants.
- Regulators ensure that licensed bodies meet their obligations and make use of the full range of their levers to ensure this, including in relation to compliance and enforcement.
- Existing investment market mechanisms, including the Capacity Market and Contracts for Difference, are improved, with the aim of minimising overall costs to consumers and maintaining security of supply.
- The costs of the transition to net zero are distributed fairly amongst all consumers and kept as low as possible, taking account of wider economic considerations such as the promotion of growth, innovation and competition.

## Retail Markets

The energy retail sector has experienced significant challenges in the past few years, with multiple market exits and wholesale price volatility. The clearest lesson from this market volatility is that the market must work better for consumers and be more resilient. However, many of the challenges facing the retail market predate the recent wholesale price issues. Government therefore wants to see a retail market that works better for consumers, is more resilient and investable, and that supports the transformation of the wider energy system. Ofgem has an important role to play in delivering these objectives.

**Working better for consumers:** Effective competition is the best guarantee of consumer protection in the long term. Ofgem's role is to ensure appropriate regulation of the domestic and non-domestic market, and to use its full range of powers to address any exploitative practices. Ofgem will also continue to be responsible for ensuring that households pay a fair price for energy, which may include introducing new or re-applying previous price protections if the default tariff cap is terminated and they are required. In the non-domestic market, businesses have been facing significantly higher prices and it has become more challenging to find suitable contracts. Ofgem's role will be to consider whether there are particular types of businesses which would benefit from further protections.

**More resilient and investable:** Ofgem also has a role to promote competition and innovation wherever appropriate and must ensure that increased resilience supports, rather than hinders, effective competition. When suppliers do fail, Ofgem will continue to have an important role in ensuring that this happens in an orderly way, through their well-established Supplier of Last Resort (SoLR) process. Ofgem will need to ensure that the SoLR process remains fit for purpose, including taking account of the lessons from recent supplier failures, and collaborating closely with government to ensure that the Energy Supply Company Administration Regime is utilised as intended, if needed.

**Supporting wider system transformation:** The retail energy market framework should accommodate the development and uptake of innovative products, services and business models that are crucial if the retail market is to support the most cost-effective transformation of the energy system. To this end, government and Ofgem will collaborate to identify and remove regulatory barriers in the current framework, and to empower consumers to engage with the choices they face in the market.

## Security of Supply

Energy security is a top priority for government. Though the UK has historically enjoyed very high levels of security of supply, even under extreme weather events, Russia's invasion of Ukraine and the subsequent disruption to global gas markets has reinforced the importance of a secure energy system. Government will work with Ofgem and the ESO/FSO to further the aims of the [British Energy Security Strategy](#) (2022) and the [Energy Security Plan](#) (2023), to improve the UK's energy security and move the UK towards greater energy independence. In accordance with existing statutory requirements set out in the Gas Act 1986 and Electricity Act 1989, Ofgem is required to carry out its functions in the manner which it considers is best calculated, amongst other aims, to secure a diverse and viable long-term energy supply. Ensuring a reliable energy supply is also strongly in the interests of consumers, in line with Ofgem's primary duty.

Liquid, well-functioning energy markets play a central role in ensuring Great Britain's continued security of supply. Significant volatility has been seen in wholesale energy markets internationally, with gas trades reaching record highs at Great Britain's National Balance Point (NBP). Ofgem are continuing, in their role as energy market regulator, to engage with and monitor the wholesale gas market, including in relation to trading activity and the resilience of market participants, to provide government with clear visibility of any emerging concerns or risks. Ofgem will continue to monitor wholesale energy markets, including in relation to the Balancing Mechanism which is used by the Electricity System Operator (ESO) to residually balance and manage the electricity system close to real time. Costs of balancing the electricity system have increased significantly in recent years, with [ESO pursuing a review of its balancing services](#). Ofgem's role will be to participate in this review, as well as ensuring that

current wholesale market arrangements are working efficiently, and market participants are actively mitigating risks. Ofgem should continue to work with the FSO on this once it is established.

The Capacity Market is government's main mechanism for ensuring electricity security of supply in Great Britain. Ofgem's role includes progressing with changes to the Capacity Market Rules, working in partnership with government, and establishing the Capacity Market Advisory Group under the Capacity Market.

The Demand Flexibility Service, launched by the ESO, has enabled consumers and businesses across the country to benefit from shifting their electricity use whilst helping ESO manage the electricity system. Government will work with the ESO/FSO, Ofgem and industry to learn from this new service and support innovative approaches to demand flexibility.

## Downstream Gas and Electricity Infrastructure Security and Resilience

Great Britain has highly resilient gas and electricity systems. Government is committed to continuing to work with Ofgem, National Gas Transmission (NGT), ESO/FSO and wider industry to understand potential risks impacting gas and electricity customers and ensure the continued security and resilience of these systems against the full range of threats and hazards facing the sector now and in the future.

The downstream gas and electricity risk profile has changed significantly over the past decade. Given the challenges of achieving net zero, ongoing climate change and shifting geopolitics, this change is likely to continue and accelerate over the coming years. Government, Ofgem, ESO/FSO and wider industry will continue to play a critical role in ensuring existing strategies keep pace with shifts in the risk landscape and consider gas and electricity interactions to support the resilience and security of downstream gas and electricity systems.

Government is responsible for setting the policy direction for security and resilience posture across the energy sector. To fulfil this role and make effective decisions, government requires robust evidence and advice provided by industry partners. Ofgem will be responsible for furthering the delivery of the policy outcomes in downstream gas and electricity security resilience, which will include setting the required licence conditions and implementing any modifications to licences, including the FSO's.

The Secretary of State for the Department for Energy Security and Net Zero will be the joint Competent Authority with Ofgem<sup>3</sup> for the electricity and gas subsectors under the Network and Information Systems (NIS) Regulations 2018. Under the NIS Regulations the Competent Authorities are required to provide guidance<sup>4</sup> to the sector and assess Operators of Essential Services for compliance with the security duties in the NIS Regulations. The Department for Energy Security and Net Zero is the lead government department for energy supply emergencies as set out in the UK Government arrangements for responding to an emergency (CONOPS - the central government's concept of operations) but government will work together with FSO in emergency incidents, ensuring there is collaboration where required.

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<sup>3</sup> The Secretary of State for the Department for Energy Security and Net Zero will be a joint competent authority when a Transfer of Functions Order comes into force.

<sup>4</sup> Regulation 3 of the NIS Regulations.



## Consumer Protection and Enforcement

Ofgem's principal objective is to protect the interests of existing and future consumers when carrying out its regulatory functions. Ofgem should make decisions in a way which balance the short and long-term interests of consumers, which incentivise the most cost-effective decarbonisation (where within its remit), and consider the impact on all consumers, especially those who are vulnerable.

Consumers must have confidence that the regulator is looking after their interests. Where poor practice by licensed bodies is found, it is critical that Ofgem use its compliance and enforcement powers to take timely action where appropriate. Government has urged Ofgem to ensure that it understands the experiences of consumers in response to suppliers' behaviour, for instance regarding prepayment meters. Ofgem should make use of the full range of levers at its disposal, including by monitoring the market and developing and maintaining processes that allow the direct examination of consumer experiences, as well as utilising the data it has access to from regulated companies.

Adequate and proportionate consumer protection should be a key aim as new products and services, delivered by a range of business models, are taken up. Ofgem shall be responsible for facilitating improvements to the consumer experience in the energy sector and assessing the impact of regulatory changes on different consumer groups. Vulnerable consumers may need extra support and Ofgem's role will be to continue to challenge the energy sector to go further to identify and meet the needs of consumers who are struggling to afford their energy bills. For business consumers, Ofgem shall be responsible for promoting an enhanced focus among suppliers on the needs of those businesses that may struggle to access the best deals and explore whether to give them further protection in the face of unfair market practices, for example to protect them from mis-selling and misrepresentation or uncompetitive practices.

## Section Three: An Energy System Fit for the Future

### Government's Strategic Priorities are:

- Ensuring flexibility in the energy system at the national and local level, and the requisite growth in flexibility markets and consumer adoption of energy smart appliances to achieve this.
- Great Britain has an economic and efficient digital infrastructure which enables a smart, digital and secure energy system, based on principles of open data, security and a whole systems approach to data sharing.
- Effective governance during the transition to net zero with regards to the codes and technical rules that govern the energy system, and effective system operation.

### Government's Policy Outcomes are:

- Competitive, coordinated, and effective flexibility markets which are open to all technologies of all sizes, including energy efficiency and demand-side solutions, and which unlock the full benefits of flexibility to best serve our net zero targets.
- Energy market design that supports government's ambition for Britain to have among the lowest wholesale electricity prices in Europe by 2035, driving economic growth in the longer term while strengthening the UK's energy security and independence.
- By 2024, an appropriate policy to enable investment in large-scale long-duration electricity storage consistent with cost-effective decarbonisation.
- Energy code governance is reformed to support the move to net zero, including the licensing of one or more code managers, as soon as practicable after the necessary legislation is in place.
- Implementation of measures from the joint [Government-Ofgem Smart Systems and Flexibility Plan](#) (2021), [Energy Digitalisation Strategy](#) (2021) and commitments from the published [joint response](#) to the Energy Digitalisation Taskforce.
- Establishment of the Future System Operator, as soon as practicable, after Parliament has legislated for its establishment, including ensuring relevant licences and codes are created and amended for the FSO to perform its roles in the energy system effectively.
- Mitigation of cyber security, grid stability and consumer protection risks related to the widespread uptake of demand side response (DSR).
- There is effective cooperation with the EU at a regulator and technical level to support the aims and obligations of the EU-UK Trade and Cooperation Agreement.

## Electricity Markets Fit for the Future

In 2022, government launched a [Review of Electricity Market Arrangements](#) (REMA) to consider potential reforms to electricity markets to meet our decarbonisation targets whilst maintaining security of supply and deliver the most cost-effective system for consumers.

Reforms to the wholesale market and investment and adequacy mechanisms (including the Contracts for Difference and the Capacity Market) as well as to wider electricity market arrangements may be needed to drive greater investment in a range of low carbon assets and enable efficient system operation. Changes may be required as the electricity system further decarbonises, to ensure continued security of supply and to help us make sure Britain has among the cheapest wholesale electricity prices in Europe by 2035..

Ofgem's role will be to participate in this review, support policy development and, depending on the outcomes, help implement a new suite of market arrangements. Ofgem will also be responsible for implementing any changes to codes and licences, ensuring the ESO/FSO makes necessary changes in its role as Electricity Market Reform delivery body, and aligning long-term changes to network charging with wider market reform.

Depending on the nature of the reforms, REMA will likely have implications for institutional and governance frameworks, including potentially for the duties and functions of Ofgem and ESO/FSO. This will be considered further as part of the REMA Programme.

## Flexible and Responsive Markets

The joint government and Ofgem [Smart Systems and Flexibility Plan](#) (2021) outlined how we will deliver the flexibility and innovation needed for a net zero system. This included actions to facilitate flexibility from consumers, remove barriers to flexibility on the grid and reform markets to reward flexibility, and Ofgem is responsible for implementing relevant measures. Flexibility from technologies such as electricity storage, smart charging of electric vehicles, flexible heating systems and interconnection could save up to £10 billion per year by 2050 by reducing the amount of generation and network needed to decarbonise and create 24,000 jobs.

Government will work with Ofgem to deliver competitive, coordinated, and effective flexibility markets which are open to all technologies of all sizes, and which unlock the full benefits of flexibility to best meet our net zero targets. This includes working with ESO to ensure balancing services are fully transparent and competitively procured. Ofgem shall be responsible for working with government to scrutinise ESO's delivery of its net zero operability objective by 2025.

In certain instances, flexibility may best be achieved at the local level. Ofgem, government, FSO and distribution system operators, and all market participants, will need to work closely to ensure local and national actions work in tandem and to coordinate national and local electricity markets to meet the full suite of system requirements. Ofgem will have a role in working towards ensuring national and local electricity markets are fully coordinated and encouraging local flexibility solutions to open services to the market to facilitate greater competition.

Effective governance arrangements have the potential to unlock significant amounts of distribution flexibility. Government and Ofgem will work together to ensure that local governance arrangements are fit for purpose to deliver effective, consistent, and coordinated

flexibility markets, by setting out clear rules and responsibilities for institutions that will ensure effective delivery of energy system planning and market facilitation. Following Ofgem's review into the effectiveness of institutional and governance arrangements at a sub-national level, Ofgem will be responsible for making recommendations on any necessary changes.

Distribution Network Operators are required to tender for flexibility services as an alternative to network reinforcement where it is economically viable (cost-effective). They must also promote the uptake of energy efficiency measures, including through procuring energy efficiency services where it is economic and efficient to do so. Ofgem should continue to support network operators to deliver these outcomes. This includes the development and use of methods to economically value energy efficiency against other network interventions, and methods to procure and deploy energy efficiency measures.

Government is seeking to maximise the participation of consumers of all sizes in demand side response (DSR). The mass uptake of EVs will create significant new demand network-wide for electricity and increase electricity consumption by households. Smart charging technology allows battery re-charging to be managed flexibly in response to electricity market signals, along with consumer needs, and will be a major step for increasing domestic consumer participation in DSR. Ensuring the roll-out of "energy smart" technology, such as smart meters, smart EV charge-points and heat pumps is a vital means for ensuring consumer engagement, offering choice, and reducing costs. Government launched a consultation in July 2022 and its response in 2023 will confirm the outline of a new policy framework that will enable the transition to a smart and secure electricity system. Market-Wide Half Hourly Settlement (MHHS) is critical to delivering the most cost-effective decarbonised energy system, and a fundamental element for retail market reform. Ofgem shall be responsible for working towards the timely implementation of MHHS as soon as possible to reward flexibility and benefit consumers. Ofgem will also have a role in ensuring that consumers are treated fairly by providers of DSR services and are protected in their participation in a smart energy system. Finally, government will work with Ofgem, the FSO and others to ensure cyber security risks to grid stability and to consumers from DSR are understood and mitigated.

The digitalisation of the energy system through the rollout of smart meters provides benefits to consumers by offering near-real time information on energy use, as well as supporting the development of innovative products and services, such as time of use tariffs and applications based on granular energy data. This step-change in the availability and granularity of data relating to energy consumption, alongside the advantages of remote communication, is a key enabler for the energy system of the future such as through the transition to MHHS. For smart metering, Ofgem's role is to rigorously monitor and ensure compliance with the full range of smart metering licence conditions. This includes, but is not limited to, those relating to installation requirements, the operation of smart meters by energy suppliers, and the New and Replacement Obligation. Ofgem's role is to ensure that enforcement or compliance action is timely, especially in the context of obligations which must be met on an annual basis, and that fines are commensurate with the cost of compliance. Ofgem will also be responsible for ensuring that the Data Communications Company remains fit for purpose into the future, by progressing the review of its regulatory framework and implementing any required changes in a timely manner, including closely managing any transition period.

In the [British Energy Security Strategy](#) (2022), government committed to enabling the deployment of sufficient large-scale long-duration electricity storage to balance the overall system most cost-effectively. To do this, government will work with Ofgem to develop an appropriate policy to de-risk investment by 2024. Government will also work with Ofgem to ensure a best-in-class regulatory framework for storage at all scales, to provide regulatory

clarity within key regulations, licences and codes as well as removing policy and regulatory barriers to market entry and encouraging investment in novel technologies such as hydrogen.

### Digital Infrastructure

The [Energy Digitalisation Strategy](#) (2021), developed by government, Ofgem and Innovate UK in coordination with the energy sector, set out a vision and suite of policies to digitalise the energy system. Government and Ofgem have committed to working with relevant parties to facilitate the implementation of economic and efficient digital infrastructure, and a principle of presumed data openness across industry, to contribute towards a smart, digital and secure energy system and enable these changes at the least cost. Government, Ofgem and Innovate UK [responded](#) to the recommendations of the Energy Digitalisation Taskforce setting out our progress and next steps on delivering digitalisation within the energy sector.

Ofgem shall be responsible for using its tools or new and enhanced measures to support the development of an agile regulatory environment for a digital energy system. As part of the RII0-2 price controls, Ofgem implemented a Special Licence Condition that obliges licenced companies to act in accordance with the Energy Data Best Practice guidance, and have recently consulted on changes to improve its effectiveness. Ofgem is also modernising the process by which networks will share data with the regulator, allowing Ofgem to take regulatory decisions quicker and more effectively. Ofgem will be responsible for ensuring that the methods Ofgem and energy networks use to exchange data between each other are modernised so that there is effective ongoing regulatory decision-making and oversight.

Government regards competition as a key driver in ensuring the digital transformation of the energy system and is committed to promoting competition in the operation of energy markets to help drive lower costs, promote innovative new services and products, and incentivise private sector investment in digitising the energy system. As this is an emerging sector of the energy market, government wants to avoid unregulated monopoly providers dominating as these tend to over price, lead to underinvest in some forms of innovation and are less incentivised by efficiency. Ofgem's role will be to work with industry to monitor issues in this area as the digital infrastructure develops.

The principle of presumed data openness is key to driving efficiency and innovation in the energy sector. As referenced in the [Energy Digitalisation Strategy](#) (2021), opening up access to our digitalised energy system and its data in a secure way has multiple benefits, from helping us discover cheaper and more flexible ways of delivering clean energy and informing network planning, to empowering consumers to make informed choices around their bills and become active participants in decarbonisation. The ultimate goal for all parties, therefore, should be to get data safely into the open and make sure it is easy to find, while balancing data subject privacy and ensuring compliance where relevant with the Smart Metering Data Access and Privacy Framework. Linking of energy data with other sectors, such as transport, heat and real estate will also help ensure that data is harnessed to its full value and that investment decisions and planning can be made with a whole-system approach.

New technology and data should be used in a way which offers appropriate and proportionate protection to consumers. Ofgem's role in this should be to work towards ensuring that new technologies are introduced to the energy sector in a way that always protects consumer privacy, and that cyber security plays a key role in any actions taken to facilitate a smart, digital and secure energy system. Ofgem will be responsible for fully leveraging its role as Competent

Authority with the Secretary of State for the Department for Energy Security and Net Zero<sup>5</sup> for the Network and Information System (NIS) Regulations to continue to implement cyber security requirements across the sector including through industry engagement, guidance development and inspections. Ofgem shall be responsible for monitoring Operators of Essential Services (OES), assessing whether OES are taking appropriate and proportionate action to meet their security duties under the NIS Regulations and taking enforcement actions where necessary.

## Governance

The future framework for the detailed technical and commercial rules of the energy system needs to be fit for purpose and facilitate net zero by enabling the innovative change at a pace required to meet targets.

Ofgem will be at the heart of Energy Code Governance, overseeing and providing direction to the future development of the detailed technical and commercial rules of the electricity and gas systems. Ofgem will need to deliver its new strategic code functions, which will be established following the successful passage of the Energy Bill. Ofgem will also deliver the transition to a new governance framework for the energy codes, which will require the development and appointment of code managers as a new class of licensees. In addition, Ofgem will be responsible for working closely with industry to bring forward the licence and code changes required to facilitate code reform, which may include code consolidation (where appropriate), and to ensure that the codes can quickly adapt to new challenges as the system transforms. Finally, Ofgem will prepare and publish an annual strategic direction to code managers setting out its vision for how the codes should evolve over the following year, taking into account relevant material from this statement as well as considering the implications of recent market developments and any relevant advice provided by the FSO.

Ofgem will have a key role and responsibility, alongside the Secretary of State, for putting in place the arrangements needed for the FSO to perform its roles in the energy system effectively. Ofgem's regulation of system operation functions will continue to drive high performance in relation to system operation activities, support the timely and effective delivery of FSO transition activities where appropriate, and ensure through ongoing regulation of the FSO that it takes full advantage of its new, broader remit. In the period of transition to the FSO, Ofgem and relevant licensed industry parties will work closely together to plan and prepare for these new arrangements. Ofgem will work with Government to assess the most efficient and value-for money approach and facilitate transition to the FSO. This will include modifying and administering existing licences and codes, supporting separation of the electricity system operator and longer-term planning functions of the gas system operator in readiness of transition to the FSO and to take other preparatory steps to prepare for an orderly and timely transition.

Following Ofgem's review into the effectiveness of institutional and governance arrangements at a sub-national level, Ofgem will make recommendations on any necessary changes to ensure these are fit for purpose to facilitate a low-cost transition to a smarter, flexible and digitally enabled local energy system.

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<sup>5</sup> The Secretary of State for the Department for Energy Security and Net Zero will be a joint competent authority when a Transfer of Functions Order comes into force.

## EU-UK Trade and Cooperation Agreement

Efficient cross-border markets can reduce the cost of energy whilst supporting our net zero targets. Following the UK's withdrawal from the European Union (EU), the UK and the EU have entered into the EU-UK Trade and Cooperation Agreement (TCA) which includes a framework for cooperation and trade in energy. Ofgem will have a role in establishing and facilitating these cooperation structures with the European Agency for the Cooperation of Energy Regulators and other neighbouring National Regulator Authorities. Ofgem's role will be to provide regulatory and other support as required to implement the TCA, as well as developing the administrative relationships required for EU-UK regulatory cooperation in the energy related matters set out in the TCA.

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This consultation is available from: [www.gov.uk/government/consultations/strategy-and-policy-statement-for-energy-policy-in-great-britain](https://www.gov.uk/government/consultations/strategy-and-policy-statement-for-energy-policy-in-great-britain)

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