

Performance report

Strategic framework overview

This Performance Report sets out delivery achievements against the activities in Ofgem's 2021-22 Forward Work Programme, structured around our Strategic Framework.

In December 2020, Ofgem published its [Strategic Framework](#). The framework helped inform our internal business planning for the 2021-22 year and was published externally in our [Forward Work Programme](#). The framework, which received a high level of support from stakeholders during the year, focuses Ofgem's resources on activities that support five **Strategic Change Programmes** and two **Enduring Priorities**.

Ofgem's Enduring Priorities capture our core regulatory responsibilities to protect current and future consumers, and effectively deliver government environmental and social schemes. The Strategic Change Programmes focus on where Ofgem can deliver the greatest impact for consumers, including delivering the transition to net zero at lowest cost. Ofgem's strategic change programmes aim to:

Future of Retail



deliver a **future retail market** that works for all consumers and the environment.

Low Carbon Infrastructure



enable investment in **low-carbon infrastructure** at a fair cost.

Full-chain Flexibility



deliver **full-chain flexibility** in how we generate, use and store energy.

Energy System Governance



ensure **energy system governance**, including Ofgem, is fit for the future.

Data & Digitalisation



unlock the benefits of **data and digitalisation**.



Responding to the gas crisis

2021-22 saw an unprecedented rise in gas and electricity prices in response to tight global markets and later the Russian invasion of Ukraine, putting energy markets under severe strain and driving up prices for energy consumers. Ofgem responded quickly to this situation and set out the key elements of its response in October.

Working with government, the energy industry and consumer bodies, we introduced measures to protect the interests of consumers, to provide greater certainty for investors, and to strengthen resilience in the sector. To address the changed situation, Ofgem made changes to both its core regulatory activities and the Future of Retail Strategic Change Programme, including:

- managing the Supplier of Last Resort process, that sees customers transferred to a new energy supplier, when companies exit the market
- enhancing monitoring, compliance and enforcement of energy supplier licence obligations, to ensure that suppliers pursue a sustainable business model, and minimise risks to consumers and the market
- adapting the price cap methodology to allow it to adapt to the more volatile market circumstances.

Responding to these unprecedented rises in electricity and gas prices necessitated a reprioritisation of Ofgem's resources, to focus on these and other urgent reforms, as set out below.

As a result, some activities in our 2021-22 [Forward Work Programme](#) were paused in the autumn of 2021. Ofgem's 2022-23 Forward Work Programme was published in late March 2022, which takes account of these changes and sets out our updated priorities for the year ahead.



Value delivered in 2021-22

Ofgem's core priority is to protect and deliver value to energy consumers. The benefits to consumers from the decisions made by Ofgem are not always easily quantifiable and estimates are based on assumptions made, but we do so to better understand the impact of the major decisions Ofgem takes. Hence, Ofgem has calculated total consumer benefits for this financial year to be ~ £1.5 billion. This includes both direct and indirect impacts of a range of decisions made.

Most of the major decisions made this year have been quantified through formal impact assessments, which has captured all benefits where applicable. This has given Ofgem further insight into where greater value can be generated.

Key highlights:

- Since August 2021, Ofgem's supplier exit processes have **protected more than four million consumers**, making sure that even when a supplier fails, customers are transferred to a new energy supplier with no disruption to their energy supply, and household credit balances are honoured.
- On average, customers on the **price cap** saved an estimated **£647** during winter of 2021-22, and compensation of **£1.9 million** was paid to customers affected by non-compliance, with a total redress value of **£4.57 million**.
- More than **£50 million** of funding was made available to energy projects by the **Energy Savings Trust**, including **£11 million** for over **200,000 fuel vouchers**.
- Ofgem oversaw the installation of **3.8 million** additional **smart and advanced smart meters** in the 2021 calendar year (up from **3.2 million** in 2020), with smart meter installations now totalling **27.8 million**, helping to enhance consumer engagement and reduce consumers' bills and carbon emissions.
- **80 innovators** used Ofgem's 'Fast, Frank Feedback' service, to develop new products and services.
- Ofgem disallowed **£1.16 million** of the Data Communication Company's incurred costs and **£317.22m** of its forecast costs, which will be transferred back to industry, and in turn to consumers.
- To help support economic recovery and stimulate innovation, Ofgem made **£300 million** funding available via its electricity distribution price control for **Green Recovery Scheme Projects**.
- The new **Strategic Innovation Fund** invested in forty projects in the transmission and distribution sectors, to accelerate the transition to net zero.
- Ofgem's policies and programmes helped deliver an increase in interconnector capacity to almost **10 gigawatts** for electricity, helping to reduce carbon emissions and consumer costs.
- The introduction of market wide half-hourly settlement in 2025 is estimated to deliver **£1.6 - £4.6 billion** in benefits for domestic and microbusiness by 2045.
- By reducing harmful investment and operational distortions, **Targeted Charging Review** changes are expected to save consumers ~ **£300m** per year, with anticipated ~ **£5bn consumer savings** in total over the period to 2040, as we move to net zero.

New responsibilities in 2021-22

As well as responding to the gas crisis, and setting out reforms for the retail energy market, Ofgem took on or prepared to take on new regulatory and scheme responsibilities.

Regulation

Heat networks

In December 2021, the Department for Business, Energy & Industrial Strategy (BEIS) announced its intention to appoint Ofgem as the economic regulator for Heat Networks through the passage of the Energy Security Bill. Ofgem will design and implement a regulatory framework for heat networks to ensure that heat network consumers – particularly the vulnerable – receive a fair price and reliable supply for heat for their homes.

New nuclear electricity generation

In March 2022, the Nuclear Energy (Financing) Act came into force, which formalised Ofgem's role as the economic regulator for new nuclear electricity generation. Through the implementation of a Regulatory Asset Based (RAB) model, Ofgem will work to deliver the greatest value for money for consumers.

Carbon dioxide storage and transport networks

In January 2022, BEIS announced its intention to appoint Ofgem as the economic regulator for carbon dioxide storage and transport networks, which is expected to be confirmed by the passage of relevant legislation.

Ofgem remains focused on delivery of its current objectives for the energy sector, as set out in the [Energy White Paper](#) and Energy Security Strategy, while being responsive to future changes, including the government's planned Strategy and Policy Statement for Ofgem.

Environmental schemes

Boiler upgrade scheme

Launched in October 2021, the scheme will offer grants from May 2023, to reduce the upfront capital costs to customers and small businesses to support the installation of low carbon heating technologies.

Green gas support

Scheme Launched in November 2021, the scheme will provide financial support to gas suppliers wishing to increase the proportion of renewable gas in the gas grid, and to encourage innovation in the renewable heat sector.

Energy company obligation – ECO4

First introduced in 2013, the fourth iteration of the scheme was developed during the year, to replace ECO3, which closed to new applicants on 31 March 2022. The ECO schemes place legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises.

Enduring Priorities

A critical part of our Strategic Framework, our Enduring Priorities – which run throughout the delivery year – comprise:

1. Our core regulatory functions to regulate the sector and protect the interests of consumers
2. The delivery of current and new government schemes to support vulnerable consumers and advance decarbonisation.

Core regulatory functions delivery

During 2021-22, we delivered against our principal objective and statutory objectives by ensuring that:

- Consumers continue to pay a fair price for their energy through the effective running of the default tariff price cap
- Consumers, particularly the vulnerable, are treated fairly by suppliers
- When suppliers exit the market, consumers are protected by Ofgem's safety net, including through our Supplier of Last Resort process or a Special Administration Regime
- Through our price controls, competition models and tender processes, energy networks continue to offer consumers value for money
- Net zero goals are supported through increased operational flexibility in the energy system
- Through our enforcement activity, we provide a credible deterrent to non-compliance
- Changes to the energy codes benefit consumers and our licensing is robust
- Network operators are resilient to cyber threats, through our joint Competent Authority role with BEIS, engaging and inspecting Operators of Essential services.

In addition, and following the end of the Transition Period, we worked with the government and energy stakeholders domestically and in Europe on implementing the EU-UK Trade and Cooperation Agreement as it relates to energy.

Details of delivery against our core regulatory activities can be found throughout this Performance Report, within the associated Strategic Change Programme sections.



Environmental and Social Scheme delivery

In addition to Ofgem's five strategic change programmes and its core regulatory activities, Ofgem administers a range of environmental and social schemes on behalf of government, which are collectively worth £9 billion per annum. The schemes fall into three main categories.

Renewable Heat schemes

Boiler Upgrade Scheme

Ofgem was named as the administrator of the Boiler Upgrade Scheme in October 2021, as part of the Government's wider package of policies to encourage low carbon heating. The scheme has a budget of £450 million over three years, which will support low carbon heating technologies in up to 90,000 homes across England and Wales. The scheme will offer grants from May 2023, to reduce the upfront capital costs to customers and small businesses. It is also intended to help reduce the United Kingdom's dependency on fossil fuels and exposure to global price spikes. The scheme is mainly focused on the installation of heat pumps, and will continue the development of the market for these proven alternatives to fossil fuel heating systems – previously supported by Ofgem's Renewable Heat Incentives scheme.

Green Gas Support Scheme and Levy

The Green Gas Support Scheme was launched in November 2021, to provide financial support to gas suppliers wishing to increase the proportion of renewable gas in the gas grid and to encourage innovation in the renewable heat sector. The scheme is expected to yield carbon savings of 8.2 million tonnes of greenhouse gases over its lifetime. The scheme is funded by a levy on fossil fuel gas suppliers, known as the Green Gas Levy, and the first payment was due in May 2022. Suppliers providing solely green gas are exempt from this levy.



Closed (to new entrants) Renewable Heat Schemes

Over the life of the Renewable Heat Incentive schemes to March 2022:



Payments made to scheme participants worth around **£155 million** (Northern Ireland RHI)



6.65 MtCO₂ forecast carbon savings (DRHI)



63 TWh thermal heat generated (NHRHI-GB and DRHI)



5,481 MW of thermal heat capacity accredited (NDRHI-GB)



Over 335 thousand payments issued worth around **£145 million** (DRHI) during 2021-22



Over 75 thousand payments issued, worth around **£800 million** (NDRHI-GB) during 2021-22



2,841 GWh heat generated (Northern Ireland RHI – over the life of the scheme to March 2021, scheme closed to new applicants February 2016)

Renewable Heat Incentive (RHI) schemes were established to help consumers – both domestic (DRHI) and non-domestic (NDRHI) – to overcome the costs involved with installing renewable heating systems, compared to more conventional fossil fuel heating systems. The schemes have helped early adopters contribute to the UK's net zero goals, by installing technologies such as heat pumps and biogas injection.

Domestic Renewable Heat Incentive

- This scheme was closed to new applications on 31 March 2022
- Received 36,384 applications during 2021-21
- Ofgem will continue to support participants and make payments where appropriate for their eligibility period (which is up to seven years).

Non-Domestic Renewable Heat Incentive

- Whilst the scheme has now closed, legislative extensions were granted in recognition of the issues faced by industry due to the COVID-19 pandemic, which were further extended in 2021
- Ofgem will continue to support participants and make payments where appropriate for their eligibility period. Participants using extensions will receive support up to 31 March 2041.



Energy Efficiency and Social Schemes

Over the life of the Energy Company Obligation schemes to March 2022:



Over **3.48m** measures installed
in **2.39 million** households



An estimated contribution of
58.31 MtCO₂ in carbon savings



An estimated **£19.3 billion** in lifetime bills
savings deliverable to vulnerable households

Over the life of the Warm Home Discount scheme to March 2021:



£3.15 billion of support for customers
in or at risk of fuel poverty



23.1 million energy bill
rebates provided

Energy Company Obligation

First introduced in 2013, the Energy Company Obligation (ECO) is an energy efficiency scheme. ECO places legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises. It focuses on insulation and heating measures and supports low income and vulnerable consumer groups, helping to meet the Government's fuel poverty commitments. The ECO3 scheme opened in 2018, and closed on 31 March 2022, delivering over 930,000 measures in this time.

During the year, Ofgem worked with government to develop ECO4, with the obligation planned to run from April 2022 to March 2026. Whilst the scheme has been delayed, Ofgem has drafted interim [delivery guidance](#), which was published in April 2022. ECO4 has a change in focus (compared with ECO3), with a 'whole house' approach ensuring properties are improved to a minimum energy efficiency rating.

Warm Home Discount

The Warm Home Discount also continues to provide assistance with energy costs to those who are in fuel poverty or are at risk of it, largely in the form of a £150 rebate (increased from £140 this year).

Renewable Electricity Schemes

Renewables Obligation scheme:



26,599 generating stations on the scheme as of March 2021



35.4 GW of renewable electricity capacity accredited as of March 2021



80.3 TWh of total supply from renewable sources generated¹ during 2020-21

Over the life of the Feed-in-Tariff scheme, to March 2021:



869,976 accredited installations



£11.08 billion payments made to generators

Renewables Obligation

The Renewables Obligation, was launched in 2002, as one of the main support mechanisms for large-scale renewable electricity projects in the UK. Currently, the scheme supports ~30% of renewable electricity supplied in the UK; significantly above the 3% when it began. Smaller-scale renewable and low-carbon generation is mainly supported through the Feed-in-Tariff ('FIT') scheme, which makes payments to participants that install electricity generating installations, such as photovoltaic panels.

While both schemes are now closed to new applicants, Ofgem will continue to operate them until all eligible payments and certificates have been issued. RO certificates will continue to be issued until March 2037, while FIT payments will be made until March 2040.

¹ Equivalent to 31% of UK supply



Ofgem's Strategic Change Programmes



Future of Retail - Change programme and associated core regulatory delivery

Consumers engage with the energy system first and foremost through the retail market.

Ofgem's aim is for the retail market to deliver good outcomes for all consumers – whether or not they make active decisions to change their supplier or tariff. In practical terms, this means delivering a fair, functioning market with products that meet their needs, and driving significant improvements in protections for consumers. During 2021-22, this aim was challenged by the impact of rapidly rising wholesale gas prices, which caused significant market disruption and supplier exits, and exacerbated price pressures on energy consumers.

Ofgem rapidly reviewed and reprioritised its 2021-22 work programme to focus on consumer protection and market integrity in response to these unprecedented rises in energy prices. The revised activities included a raft of new measures to boost financial resilience in the energy sector, including development of new stress testing for suppliers, and developing market-wide compliance assessments that began in January 2022.

Ofgem remains committed to identifying what further reforms are required to best deliver a retail market that will deliver fair prices for consumers, support the transition to net zero at lowest cost, provide effective protection for consumers and be resilient to change.

Strategic change programme delivery

Suppliers provide consumers with a stable energy supply and effective service; and consumers, particularly the vulnerable, are treated fairly by suppliers

Ofgem published an open letter to the energy industry in October 2021, setting out imminent changes to licence conditions and broader reforms of the [regulatory frameworks](#). This was followed by the publication of an [action plan](#) for financial resilience in December.

To respond to these unprecedented energy price rises, Ofgem has reformed the economic and business model of suppliers without sufficient capital reserves.

Liberalising the regulatory model for energy supplier licensing from 2010 achieved its goal of facilitating new entry and increased competition in the retail market, but too many of the new entrants pursued unsustainable business models and committed insufficient capital to withstand shocks.

Recent pressure on the market has led to exits for a number of suppliers that were inadequately capitalised. Ofgem's reforms include proposals to ring-fence renewables levies and customer credit balances (subsuming recommendations from the ongoing Supplier Licensing Review) with a view to developing broader financial resilience and controls, to be implemented in 2022-23. Ofgem also responded by:

- introducing a requirement for suppliers to make all tariffs available to new and existing customers
- introducing a market stabilisation charge, to incentivise responsible hedging by suppliers and to reduce the risk of costly supplier exits when prices fall
- temporarily pausing the entry of new energy suppliers into the market, and
- extending the assessment period of new licence applications, to allow for more rigorous assessment of applicants' business models, resources, and fitness to enter and operate in the market.

Developed and implemented a robust financial regulatory framework

Ofgem has introduced top-down financial regulations to ensure that energy suppliers:

- have adequate risk management and available capital to manage reasonable market risks
- have suitable governance processes in-place
- are run by fit and proper leaders.

Ofgem has moved to a more proactive regulatory and compliance stance, developing stress tests and market-wide compliance assessments that will be implemented in 2022-23, to regularly test suppliers' financial health and whether they are meeting their obligations to consumers. This will allow Ofgem to respond more quickly with compliance activity, and where appropriate enforcement action. In January 2022, Ofgem also took decisions to strengthen assessments and to require additional reporting from suppliers that are considering significant commercial activities, such as trade sales or changes in senior personnel, to ensure they are fit and proper.

Reformed the price cap to strengthen its resilience in the face of high and volatile energy prices

After consultation, we proposed in May 2022 moving to quarterly price cap updates rather than twice a year. This second consultation closed in June, and we will announce our decision later this year. Further reforms and adjustments may be required to ensure that the price cap methodology can continue to protect consumers at times of price volatility, as Ofgem monitors and responds to changes in the energy market participants.

Consumers engage and take advantage of a competitive retail market and technological change to support decarbonisation

Heat Networks

BEIS announced in December 2021 that it intended to appoint Ofgem as the [Heat Networks](#) regulator, and has since committed to introducing legislation that will introduce the regulatory framework for heat networks.

This will support the heat network sector to grow and decarbonise, and at the same time ensure consumers are protected from poor standards and disproportionate prices. Since the December 2021 announcement, Ofgem has begun to develop our regulatory approach, considering how a modern, digital approach to regulation can best regulate the growing heat network sector, and worked closely with BEIS and the Scottish Government to define interactions between the Scottish licensing regime and the BEIS framework.

Faster, more reliable switching

The switching programme aims to reduce the time it takes to switch energy supplier, and reduce the number of failed switches through improvements to central industry systems. During the year, the switching programme completed system integration testing, user testing, and end-to-end process testing. In March 2022 the programme entered its transition phase, ahead of planned go-live in July 2022. During 2021-22, Ofgem concluded all outstanding consultations, and developed the code and license changes to support implementation.

Core Regulatory Delivery

Suppliers provide consumers with a stable energy supply and effective service

Throughout 2021-22, Ofgem closely monitored the financial position of retail energy suppliers at risk of leaving the market and deployed our supplier exit processes to protect more than four million consumers.

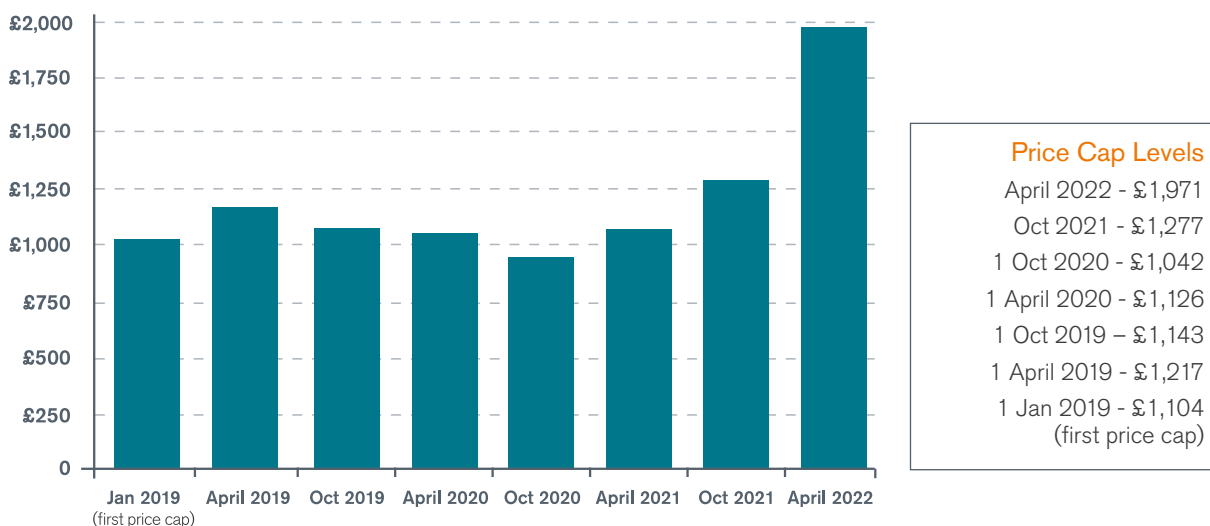
From August 2021, twenty-eight smaller suppliers exited the market, precipitated by large increases in the cost of wholesale energy prices, affecting around 2.4 million customers.

One large supplier, Bulb, also failed, which required Ofgem, working closely with government, to use its Special Administration Regime (SAR) powers to protect 1.6 million customers.

These processes have ensured that, even when suppliers fail, customers have been transferred to a new energy supplier with no disruption to their energy supply, and household credit balances have been honoured.

Consumers pay a fair price for energy and benefit from rights and protections

Default tariff price cap



The price cap ensures that energy suppliers can only charge consumers on their default tariff a fair price, based on the true cost of supplying electricity and gas – and no more. The price cap has saved consumers ~£1 billion per year since its introduction in 2019. The price cap has also delayed and smoothed the impact of the rise in energy prices, but has nevertheless risen to record levels. Price cap changes during the last twelve months were as follows:

- 1 April 2021: the price cap rose by 9% to £1,138² to reflect increased wholesale costs, network and policy costs, and an adjustment for COVID-19
- 1 October 2021: the price cap rose by 12% to £1,277. Wholesale costs rose due to a combination of lower gas supply due to the global COVID-19 recovery, increased demand in Asia and protracted cold spells over the winter
- 1 April 2022: the price cap rise by 54% to £1,971. This rise was driven by wholesale costs due to strong demand to refill low levels of gas storage across Europe, additional costs incurred by suppliers, and increased network costs, driven by the recovery of the Supplier of Last Resort levy costs.

² The level of the cap shown is for a dual fuel, direct debit customer, calculated using the latest Typical Domestic Consumption Values (TDCVs)



Retail Compliance

Ofgem has continued to hold retail energy suppliers to account, to ensure that the energy market remains fair for consumers. We do this by engaging with suppliers through effective account management, and also with other parties to gather intelligence on supplier performance, intervening where necessary and by promoting good practice. When risks or issues are identified, Ofgem issues formal 'Requests for Information'. For the period 2021-22 Ofgem has:

- Investigated 69 new instances of potential non-compliance, of which 25 were progressed to compliance engagement with suppliers
- Concluded 29 compliance engagements across 25 different suppliers that involved either compensation payments to customers, redress payments into the Energy Industry Voluntary Redress Fund, or both
- Secured refunds, compensation and redress payments for over £1.9 million affected customers, with total redress value of £4.57 million
- Had close engagement with all suppliers appointed through the Supplier of Last Resort (SoLR) process to ensure that new customers were onboarded as promptly and efficiently as possible, and to resolve any consumer issues, arising from the SOLR appointment.

Details of investigations and enforcement activity is set out in Appendix II of this report.

More consumers manage their energy use flexibly through smart metering

Market-wide half-hourly settlement

Market-wide half-hourly settlement (MHHS) will be a vital enabler of flexibility by incentivising suppliers to offer new tariffs and products that encourage more flexible use of energy and help consumers to lower their bills. Following the [publication](#) of Ofgem's decision to proceed with the MHHS operating model April 2021, the regulatory basis for implementing the programme was [published](#) in August and licence and code obligations were updated by October 2021.

Smart meter rollout oversight

Ofgem has regulatory oversight of the smart meter roll-out carried out by energy suppliers. Smart meters are a key building block to meeting the objectives of the joint Ofgem / BEIS [Smart Systems and Flexibility Plan](#), that will enable consumers to change their consumption patterns to match when cheaper and low-carbon electricity is available, by giving them greater control over their energy use. Given the disruption in the energy market during the year, BEIS allowed a further extension to introduce new rollout requirements, which will now commence in the 2022 reporting year.

DCC annual price control and price control review

The Data Communications Company (DCC) is contracted to deliver the Great Britain-wide smart meter communications network. Ofgem regulates the DCC as a monopoly provider with a price control to ensure value for money. During 2021, Ofgem engaged with stakeholders on potential changes to the DCC's regulatory framework, though this was also paused due to the market disruption. Ofgem's annual decision on [DCC costs](#) was published in October 2021, which disallowed £1.16 million of incurred costs and £317.22 million of forecast costs. These will be transferred back to industry, and in turn to consumers.



Low Carbon Infrastructure - Strategic Change programme and associated core regulatory delivery

The transition to net zero requires a major transformation of the energy sector, including in the physical infrastructure that carries heat and power to our homes and industries. This transformation will require major investment. In addition to £30 billion of investment recently approved in Ofgem's electricity transmission and gas network price controls, a range of new mechanisms were introduced, providing the flexibility to approve more than £10 billion of additional net zero expenditure over the next five years. Additional expenditure will also be required in electricity distribution networks, new power generation and the deployment of low carbon technologies, such as heat pumps; and in electricity networks beyond Ofgem's price controls, such as offshore wind links and interconnectors.

During 2021-22, Ofgem took an active role in facilitating this investment and ensuring that it was efficiently spent. The Low Carbon Infrastructure programme delivered the first year of a three-year programme to:

- efficiently transform the onshore electricity network, connecting and enabling new sources

of low carbon generation (e.g. offshore wind generation) to meet net zero targets

- support the expansion of the offshore network and interconnectors, including enabling a coordinated approach to offshore network development
- provide advice and develop regulatory mechanisms to enable investment in carbon capture, usage and storage (CCUS), transport and storage and new nuclear power, where requested by government
- prepare gas networks for a transition to a low carbon future, helping understand the feasibility and costs of hydrogen in the gas grid
- develop new regulatory approaches and best practices to manage cyber risks to energy infrastructure.

The activities Ofgem has undertaken in 2021-22 have achieved the following deliverables and contributed to our strategic framework outcomes as follows:

Strategic change programme delivery

Effective onshore network price controls are put-in-place

During 2021-22, Ofgem continued to develop the next price control for electricity distribution (RIIO-2 ED), which will set the outputs for the UK's fourteen Distribution Network Operators (DNOs). The price control sets out what DNOs will need to deliver for their consumers and the revenue that they will be allowed to collect.

Following independent challenge by the RIIO-2 Challenge Group and Consumer Engagement Groups (CEGs), DNOs submitted their final business plans for assessment in December 2021. Final CEG reports on these plans were published in January 2022 followed by the final report of the [RIIO-2 Challenge Group](#) in February 2022.

These reports and wider stakeholder evidence on the final plans informed the series of public Open Hearings held with each of the DNOs in March 2022. Ofgem will set out its Draft Determinations in summer 2022 and, following a period of consultation, its Final Determinations by December 2022.

Future network investment offers value for money and drives net zero outcomes

Interconnector policy review

Over the summer of 2021, Ofgem consulted on recommendations and proposals for its approach to new electricity interconnectors, to meet government's ambition for 18GW (gigawatts) of interconnection by 2030, and to help facilitate net zero ambitions of up to 50GW of offshore wind by 2030.

A [decision](#), published in December 2021, sets out how such targeted investment for interconnectors, including multi-purpose interconnectors (MPIs), will need to be informed by analysis that is integrated within whole-system planning processes. Ofgem has committed to running a third Cap and Floor application window and an MPI pilot programme in 2022.

Offshore Transmission Network Review

Launched in July 2020, the Offshore Transmission Network Review (OTNR) seeks to deliver increased coordination of offshore transmission and interconnection, with a view to finding a better balance between environmental, social and economic costs, to support the delivery of 50GW of offshore wind by 2030. Ofgem published a [consultation](#) in July 2021 to seek views on greater levels of coordination to meet OTNR objectives, focusing on three workstreams:

- early opportunities, to facilitate anticipatory investment
- pathway to 2030, focusing on business models to coordinate offshore transmission assets for Scotwind and Crown Estate Leasing Round Four projects
- how the existing licencing framework can be adapted to take advantage of MPIs.

Following the publication of an update on the [consultation](#) in January 2022, Ofgem issued a '[minded-to](#)' decisions on each workstream in June 2022, and will finalise and implement decisions from summer 2022 onwards.

Electricity Transmission Network Planning Review

In November 2021, Ofgem also published a consultation³ to consider the need for improvement in electricity transmission network planning, to help deliver decarbonisation targets. The consultation included a proposal to introduce a new Centralised Strategic Network Planning model, to be led by the independent System Operator. A decision will be published during the new financial year.

Support net zero transition

New nuclear electricity generation

Ofgem continued to provide advice on the design and implementation of a regulated asset base (RAB) model for new nuclear projects. A RAB model will provide the basis for an economic regulatory framework for investment in new nuclear electricity generation. In March 2022, the Nuclear Energy (Financing) Bill passed into law, which will make the implementation of a RAB model possible, and confirmed Ofgem's role as the economic regulator for the sector. Ofgem will continue to work with BEIS to develop a workable implementation model for a RAB regime into 2022-23.

Carbon capture, usage and storage

Ofgem also continued to work with BEIS to provide advice on the design and implementation of RAB models for CCUS transport and storage networks, to enable BEIS's ambition to establish at least two CCUS industrial clusters by the mid-2020s. In January 2022, BEIS identified Ofgem as the entity best suited to take on the role of the [economic regulator](#) role. BEIS is expected to lay new legislation in the summer of 2022, to establish a new economic regulatory framework for the transport and storage of carbon dioxide.

Hydrogen

Ofgem published a '[minded-to](#)' decision in March 2022, to fund two detailed design studies, to help create a hydrogen-heated village by 2025. If approved, the studies will help gather the evidence needed for government to decide whether to promote hydrogen, transported through the existing gas network to decarbonise heat in buildings.

³ Consultation on the initial findings of our Electricity Transmission Network Planning Review | Ofgem

Core Regulatory Delivery

Existing onshore networks offer value for money and drive net zero investment

RIIO-2 Implementation and Monitoring

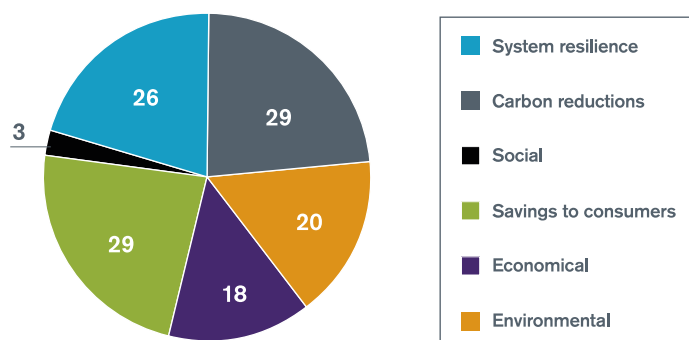
The Competition and Markets Authority published its Final Determinations on the RIIO-2 appeals for Gas Distribution and [Transmission Price Controls](#) in October 2021, upholding a majority of the matters under appeal, with the findings implemented within the final RIIO-2 settlement.

Network owners and the Electricity System Operator (the ESO), regulated through RIIO-2, will report on their performance against the price controls, for the year 2021-22, to Ofgem for the first time in 2022.

RIIO-1 Closedown and Monitoring

Given the uncertain nature of some elements of the price controls, some areas can only be settled once all costs and actual performance is known. In all sectors, Ofgem published consultations on how RIIO-1 would be closed out. Annual performance summaries were also published, covering areas such as performance against outputs, network company investment and bill impacts.

Strategic Innovation Fund



During the year, Ofgem partnered with Innovate UK, part of UK Research & Innovation, to introduce the [Strategic Innovation Fund](#) to support the ESO, electricity transmission, gas transmission and distribution sectors to develop innovative projects with the potential to accelerate the transition of energy networks to net zero.

The Fund is expected to invest up to £450 million in energy network innovation between 2021-26. In the new financial year, projects will be assessed to receive up to £500,000 to develop their ideas.

Network companies are cyber resilient

Cyber Competent Authority

Through a joint Competent Authority role with BEIS, Ofgem continued a programme of Network and Information Systems (NIS) Regulation inspections to assess the level of cyber resilience across the sector, with a view to maintaining and improving standards.

In October, Ofgem published a [call for input](#) on a revised version of NIS guidance for downstream gas and electricity operators, and a consultation on draft NIS enforcement guidance and [penalty policy](#). The guidance provides information on the processes and procedures Ofgem will apply when taking enforcement action under the NIS Regulations. The updated [guidelines](#) came into effect in March 2022.

Existing offshore networks offer value for money and drive net zero investment

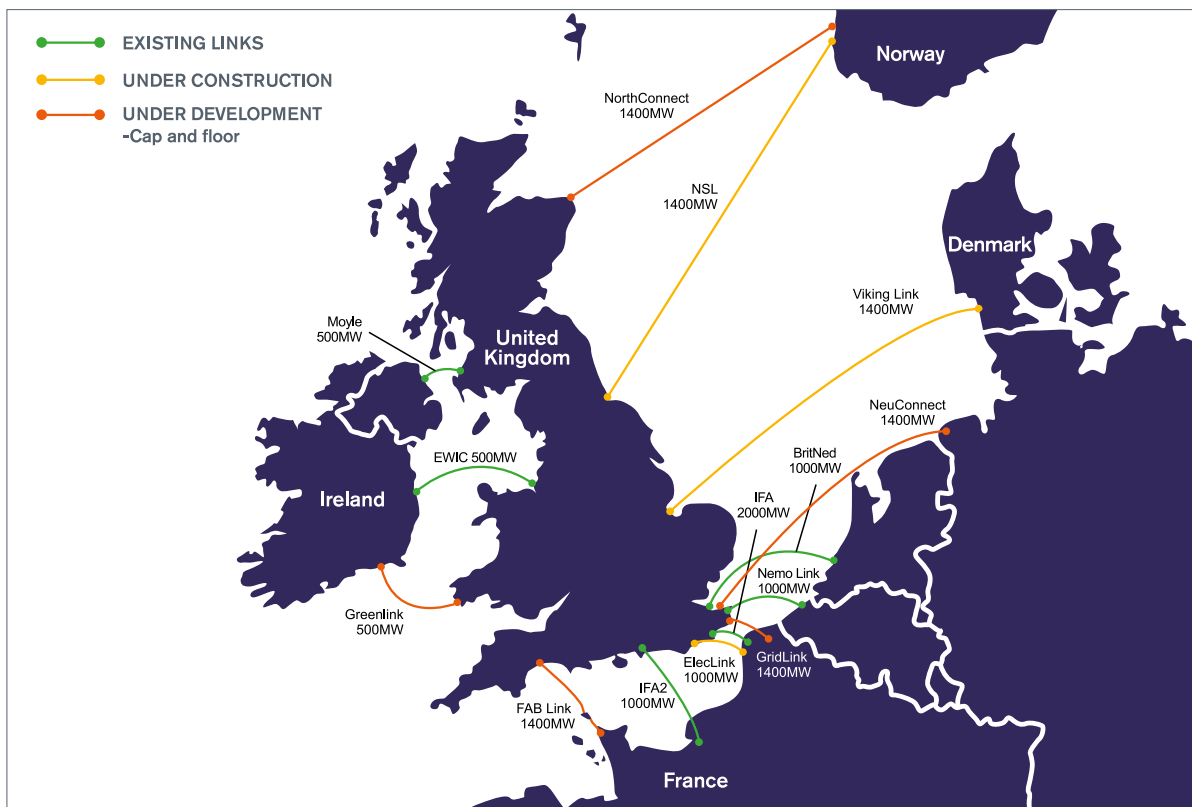
Offshore Electricity Transmission Owner (OFTO) tenders

Ofgem's offshore transmission regime underpins the UK's renewable energy targets, by connecting offshore electricity generation to the onshore grid. A competitive tender process manages the sale of offshore transmission assets and the granting of generation licences, to deliver new infrastructure at low costs.

In June 2021, Ofgem launched Tender Round Eight for prospective bidders to connect the Hornsea Project 2 Wind Farm (installed capacity 1,368 MW), expected to be worth more than £1.2 billion. In January 2022, Tender Round Nine was launched for Seagreen Phase 1 transmission assets, expected to be worth between £0.5-1.0 billion.

Interconnectors

Great Britain (GB) is connected to neighbouring countries by an undersea network of cables – interconnectors – which allow us to exchange electricity internationally, helping to reduce wholesale prices and to access a wider range of low-carbon electricity sources.



In 2021-22 the NSL interconnector to Norway started operating, increasing GB’s interconnector capacity from 6GW to 7.4GW. Ofgem regulates new interconnectors through its Cap and Floor regulatory framework. During the past year, the following progress was made to increase interconnector capacity:

- In April 2022, Ofgem published a consultation for the [Final Project Assessment](#) for the NeuConnect interconnector development
- In March 2022, Ofgem also published a consultation on its [Post Construction Review](#) of the IFA2 interconnector to France, which sets the final regulatory regime for the project
- In October 2021, Ofgem published a decision on the [Final Project Assessment](#) of the Greenlink [project](#) to Ireland, which enabled that project to take a final investment decision and begin construction in spring 2022. When completed, Greenlink will be the third connection to the Irish electricity market
- In 2015, Ofgem granted a Cap and Floor regime in principle for the [FAB Link](#) interconnector development, which was subsequently postponed in 2020. Ofgem has recently published a decision in March 2022, setting out the needs case reassessment of the development, indicating – on condition – that the link is likely to still be in the interests of current and future GB consumers.



Full Chain Flexibility - Strategic Change programme and associated core regulatory delivery

The potential for energy flexibility to reduce costs as we transition to a net zero system is widely acknowledged. As the share of variable renewable generation rises, and electricity demand from heat and transport grows, the electricity system will need to become more flexible if system costs are to be minimised. In July 2021, Ofgem and BEIS jointly published the Smart Systems and Flexibility Plan. The Plan sets out that in a fully flexible electricity system, every connected resource could contribute its full potential to meet system needs and deliver cost savings of up to £10 billion per year in 2050, primarily from avoided investment in generation plant and network capacity.

Enabling and supporting this increase in flexibility will require widespread smart metering (see the Future of Retail Core Regulatory Delivery section) and implementation of market wide half-hourly settlement to support flexible tariffs and new consumer products.

To help bring about a more flexible system, in 2021-22 **Ofgem delivered against the following aims:**

- publishing an updated Smart Systems and Flexibility Plan with BEIS, identifying the actions required across four key areas: facilitating flexibility from consumers, removing barriers to flexibility on the grid, reforming markets to reward flexibility and digitalising the system
- taking forward actions to integrate smaller, distributed energy sources (including EVs and heat pumps) to help bring the demand-side into a flexible energy system
- aligning charging reforms (Access and Forward-Looking Charging) with the requirements of a more flexible system
- encouraging whole-system approaches to flexibility among regulated parties.

The activities Ofgem has undertaken in 2021-22 have achieved the following deliverables and contributed to our strategic framework outcomes as follows:

Strategic change programme delivery

Cost effective net zero is supported through flexibility, while maintaining security of supply

Flexible, wholesale market reform

Two key elements of the Smart Systems and Flexibility Plan were taken forward, with the publication in April 2022 of a call for evidence on Large-scale and Long Duration Electricity Storage, and supporting BEIS on their Review of Electricity Market Arrangements, to consider whether wholesale market arrangements are fit for net zero.

Distribution System Operator and whole system regulations

Ofgem has worked with industry to develop archetypes on the roles and functions of Distribution System Operators (DSOs) and local governance, recently

setting out options for consideration in a [call for input](#). This feedback will help us develop the right institutions to coordinate and manage local system operation and flexibility services.

In April 2021, we published our decision to implement the Whole Electricity System licence condition, requiring all Distribution Network Operators (DNOs), Independent DNOs and onshore electricity [Transmission Owners](#) to coordinate in the interests of energy consumers.

This was followed with DNO workshops in the summer of 2021 to help develop appropriate metrics and incentives for the RII0-2 price control electricity distribution (ED2) submissions, and a consultation on an updated set of proposals for assessing CLASS (Customer Load Active System Service) as a balancing service in ED2.

Electric vehicles

In September 2021, Ofgem published [our priorities](#) for how we will support the rollout of electric vehicles in Britain, and how we will ensure the electric vehicle rollout unlocks the full benefits for consumers and the environment, as well as reduces the cost of the energy system.

This document set out four areas of priority activity:

- ensuring the network is ready for electric vehicle adoption
- reducing barriers to network connection
- the deployment of smart charging
- Vehicle-to-Grid and supporting consumer participation and protection.

Ofgem also continued to work with colleagues from across government, including the Office for Zero Emission Vehicles (OZEV), the Department for Transport and BEIS, to support the rollout of charging infrastructure across the country at both a localised level (Local Electric Vehicle Infrastructure Scheme) and across the Strategic Road Network (Project Rapid).

European coordination

Following the United Kingdom's departure from the European Union, Ofgem is no longer a member of the Agency for the Cooperation of Energy Regulators (ACER). A Memorandum of Understanding was agreed with ACER and Northern Ireland's Utility Regulator which, subject to approval by the United Kingdom Government and the European Commission, will allow Ofgem to cooperate, provide mutual assistance and exchange information with ACER, on topics including security of supply, gas decarbonisation, offshore energy, and preventing market abuse.

Ofgem continued to work with other National Regulatory Authorities across Europe - through the Council of European Energy Regulators (CEER) - on matters of mutual interest, including issues relating to supporting net zero and ensuring continued cross-border and whole system arrangements.

Core Regulatory Delivery

Efficient network charging arrangements are in place

Implementing the Targeted Charging Review and action on transmission charging

Every year, consumers pay over £10 billion to cover the costs of new and existing electricity network assets and to keep the complex electricity system in balance. To manage this, Ofgem initiated the Targeted Charging Review (TCR) to ensure the residual charges needed to cover the costs of operating, maintaining and upgrading the electricity grid are spread fairly. The TCR decision confirmed that residual network charges, including the Transmission Demand Residual charges that recover much of the cost of the transmission network, should be recovered through fixed charges on Final Demand consumers.

In the autumn of 2021, Ofgem opened a call for evidence on the extent to which reform of

transmission network use of [system charges](#) is needed. Ofgem provided an update in February 2022, which set out a commitment to a significant programme of work on the longer-term purpose and structure of transmission charges in a net zero energy system. The ESO has been tasked with leading Task Forces under the Charging Futures arrangements, to improve charging under the current framework.

Access Significant Charging Review decision

Ofgem developed further Charging and Access reforms in 2021-22, and in May 2022, published our Final Decision and Direction on the Access [Significant Codes Review](#) (SCR). The decision sets out changes, which will reduce the costs borne by connecting customers whose connection to the distribution network requires wider network upgrades, such as electric vehicle rapid charging hubs, fleet or bus depots by moving some of the



costs of additional network reinforcements into the network charges paid by all electricity consumers in the area. Ofgem has directed industry to implement the changes in line with the next price control period for distribution network operators, coming into effect in April 2023.

Distribution Charging SCR

Following consultation in November 2021, we created a separate SCR to review [Distribution Use of System \(DUoS\)](#) charges. Work on DUoS reforms is expected to take place throughout the year, with the expected implementation being from 2026.

Capacity market delivers cost effective net zero delivery and security of supply

[The Capacity Market](#) is at the heart of the government's strategy for ensuring secure electricity supplies, at least cost to consumers. It is technology-neutral, with existing generators competing against a range of other technologies to ensure that our electricity supply is secure for the future.

Following a consultation in May 2021 for outstanding rule change proposals, Ofgem published 'minded-to' decisions for several policy areas to amend the Capacity Market Rules. This covered relevant balancing services, the Capacity Market register, relevant planning and consents, as well as the maximum obligation period. Ofgem also published a call for input requesting stakeholder views on the set up of the [Capacity Market Advisory Group](#). Once established, the Group will work closely with Ofgem to prioritise and optimise the timings of Capacity Market Rules change proposals.

Net zero transition goals are met through effective system operation

In April 2021, the RII0-2 price control commenced for the ESO, which was set by Ofgem. The price control period runs from 2021 to 2026. The ESO has a central role in our energy system, delivering the real-time operation of the electricity transmission system, market development, managing connections, and shaping network investment.

The ESO Performance Panel and Ofgem monitor performance delivery on a six-monthly basis. By providing feedback on performance to the ESO, Ofgem ensures that it will be able to act and make any necessary improvements during its two-year business plan period. A final decision on the ESO's performance scores will be made by Ofgem by August 2023, with a maximum reward under the incentives scheme of £30 million and a maximum penalty of £12 million.



Data and Digitalisation - Change programme delivery

As the energy transition continues, the energy sector is becoming more complex, and the benefits of clear communication and data sharing are growing. The smart creation, collection and use of energy system data is fundamental to managing this complexity, and for unlocking new sources of value for all energy stakeholders, including lower costs and improved consumer protection.

During 2021-22, Ofgem committed to using and sharing data effectively as a core component of our internal operations and regulatory decisions. Looking outward, the data and digitalisation Strategic Change Programme developed activities to ensure better regulatory decisions are taken through the improved use of data, and that data is used more effectively by the market, through modern data regulations.

Ofgem's key aims in 2021-22 were to:

- provide leadership and collaboration to deliver the scale of change required
- establish new data and digital defaults, and ensure the sector is incentivised and coordinated to adopt them
- enable the sector through new and existing shared infrastructure to grow and develop future data and digital solutions that work for consumers.

The activities Ofgem has undertaken in 2021-22 have achieved the following deliverables and contributed to our strategic framework outcomes as follows:

Strategic change programme delivery

Increased data sharing, to enable new and more efficient markets and for consumers to be able to take greater advantage of this data

In June 2021, Ofgem formally consulted on two sets of guidance as part of the RIIO-2 price control, setting out obligations for energy network companies to comply with data best practice and 'Digitalisation Strategy and Action Plan' [guidance](#). This was followed by a final [decision](#) in November 2021, setting out best practice and an action plan, and confirming that the data and digitalisation standards would apply to regulated parties as well as Ofgem, with the aim of opening-up energy systems data. Looking ahead to 2022, these standards are now embedded in the draft licence conditions for the RIIO-2 electricity distribution price control (ED2), which will be included in the Draft Determinations in June 2022.

Improve planning and management of energy data, including reviewing the digital energy market

Ofgem completed a digital markets review, to:

- help identify and understand existing and emerging data and digital service providers in the energy sector
- identify implications for energy consumers
- be aware of monopolistic risks
- to inform future regulatory solutions in this space.

The review was completed in March 2022, which will be followed-up with a call for evidence in summer of 2022.

Ofgem also developed the approach for a forthcoming compliance review of the digitalisation standards of the RIIO-2 licence conditions, as described above.



Improve regulatory decisions, through Ofgem making greater use and sharing of data

Throughout 2021-22, Ofgem built the capacity and capability of our Data and Digital insights Team and developed clear implementation plans for the Data and Digitalisation Strategic Change Programme. We also undertook a best-practice review of global regulatory approaches for data sharing, consent and digital regulation in order to inform the development of this Strategic Change Programme.

Ofgem's Data Best Practice guidance was implemented in March 2021. We will be undertaking a review of its progress in the summer of 2022, to assess how relevant organisations are managing their obligations.

This capability building has led to the team supporting the wider gas crisis activities through offering insights generated from Ofgem's internal use of data, and by improving our approach to regulation through applying analytical techniques to complex and high-volume data, such as our approach to market monitoring. This included assuring consumer protections for time of use tariffs, analysis of 20,000 price cap consultation responses, and improving complaints monitoring reporting.



Energy System Governance - Change programme and associated core regulatory delivery

To facilitate the transition to a more flexible, data enabled, net zero energy system, Ofgem considers that there is a case for stronger strategic oversight and better whole systems coordination, which will likely require changes to existing governance (institutions, procedures, codes, standards and licensing arrangements).

During 2021-22, Ofgem – working closely with BEIS – began the process of reviewing the institutional and governance landscape to consider whether those structures remained fit for purpose. This included reviewing the current energy codes and their governance arrangements, and supporting wider government thinking on options for a ‘whole system’ Great Britain system operator.

Ofgem has delivered substantial progress against the following aims:

- establishing (with government) a clear, integrated vision for energy system governance
- developing and implementing important reforms, particularly those arising from the Energy Codes Review
- identifying Ofgem's medium and long-term goals as the energy regulator, and beginning to change its shape, functions and regulatory model to align with these goals.

The activities Ofgem has undertaken in 2021-22 have achieved the following deliverables and contributed to our strategic framework outcomes as follows:

Strategic change programme delivery

Net zero transition goals are met through system operation

Future System Operator

In April 2022, Ofgem and BEIS published a joint response to a consultation that was held during the year, setting out a commitment to proceed with the creation of an expert, impartial Future System Operator (FSO). The FSO will be established as a public corporation, with all the main existing Electricity System Operator roles and longer-term planning, forecasting and markets roles of the Gas System Operator. Introducing the FSO is intended to enable more coordinated, strategic and whole systems planning.

Distribution System Operator Governance - Call for Input

During the year, Ofgem reviewed the effectiveness of institutional and governance arrangements at the sub-national level, to achieve the most cost-effective and reliable integration of distributed low carbon generation and flexible demand.

In April 2022, Ofgem set out its initial views on the challenges and opportunities for the distribution-level institutional framework, and called for input on various reform options.

In September 2021, Ofgem published the business plan guidance for RIIO-2 electricity distribution price control, which introduced a distribution system operator baseline expectation that distribution network operators (DNOs) address actual and perceived conflicts relating to investment decisions on flexibility and traditional network solutions. This supports DNOs having in place executive-level accountability and board level visibility, clear and separate decision-making frameworks, and independent oversight such as external auditing.

Codes benefit consumers and licensing is robust

Energy Code Governance Reform

As part of the above activity, in July 2021, Ofgem jointly initiated with BEIS a consultation on [Energy Code Reform](#), which closed in September.



In April 2022 Ofgem and BEIS [published](#) a joint response which set out a package of reforms to the energy code framework to facilitate more effective governance of the energy system. This includes giving Ofgem a new strategic oversight role for the energy codes, and the introduction of licensing for code managers. These reforms are expected to be implemented through legislation, and Ofgem will undertake preparatory activities in the new financial year, alongside the legislative process.

A parallel exercise also saw Ofgem review the future governance of engineering standards. In July 2021, BEIS published its [response](#) to the engineering standards review, setting out how it intended to respond to the recommendations, and indicated that the engineering standards should not be included in the Energy Bill, but rather reforms taken forward through code governance reform, giving Ofgem strategic oversight as the Strategic Codes Body.

Core Regulatory Delivery

Robust industry codes and licensing benefit consumers

Throughout the year, Ofgem carried out its statutory functions to process licensing applications, support organisations in making changes to codes and licenses, and oversee industry code governance arrangements, including leading stakeholder engagement with the industry code bodies and panels. Ofgem also updated the licence application guidance. As such, Ofgem continued to deliver licensing decisions in line with key performance indicators (see Appendix I for more details).

Ofgem published a joint consultation with BEIS to consider the design and delivery of Energy Code reform in July 2021. This was followed by a joint response to the consultation published in early April 2022 (see Energy Systems Governance section for details).

Engaging with our stakeholders

With energy prices rising to unprecedented heights and the cost of living increasing, our stakeholders have experienced one of the most challenging years yet. Consequently, stakeholder engagement has been more important than ever.

Over the past 12 months we have engaged our stakeholders to understand their challenges and needs and gathered insights to inform our decisions and policies. High-profile events over the year such as the energy crisis and COP26 resulted in our CEO and the senior leadership team taking part in a record number of speaking engagements and media interviews.

Energy crisis and our engagement response

Since the energy crisis started, we have engaged intensively across the sector. Martin Cave and Jonathan Brearley, along with our Director of Retail, Neil Lawrence have been on visits across the country, speaking to organisations, charities and consumers to gain greater insight into the real impacts of the crisis and the challenges that people are experiencing. Our senior leaders have also held meetings with supplier CEOs throughout the crisis, as well as engaging with wider senior stakeholders to gather insight and hold open, transparent discussions. We have continued to meet regularly with our working groups such as the Large User Group and the Small User Group for non-domestic consumers, enabling them to feedback on proposed policy changes and consultations, and share their concerns and priorities.

D&I 50:50

At Ofgem, we are prioritising diversity and inclusion more than ever. We are moving closer to 50% female representation at both Board and Exec level and planning significant further action as part of our bold new Diversity and Inclusion strategy, recognising that we still have a long way to go.

In April 2021 we held a cross sector Equality, Diversity and Inclusion virtual event with Energy UK on the theme of 'from intention to action' to convene and learn from best practice to improve diversity and inclusion across the energy sector.

We also became one of the first energy sector and civil service organisations to join the BBC 50:50 Equality Project. The project supports organisations to create content that better reflects the world around us by monitoring representation and tracking progress towards a 50:50 gender split. We have made significant improvements throughout the year and in Q4 we reached 50:50 for the first time. Our notable successes included improved representation of females across Ofgem events and external speaking engagements and increased awareness of our commitments across Ofgem.

COP26

In November we took part in the 26th UN Conference of Parties in Glasgow (COP26), where Ofgem launched the Regulatory Energy Transition Accelerator (RETA), together with the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA) and the World Bank. This global initiative aims to accelerate the energy transition to provide clean, secure, and affordable supplies to everyone. Twenty-two international energy regulators signed up to the RETA ahead of COP26 and it has continued to grow.

As part of Ofgem's "Green, fair future" engagement and communications campaign in the run up to COP26, we hosted a series of energy related events and webinars which focused on some common issues faced by regulators in enabling energy-related decarbonisation. This programme of events brought together international regulatory representatives and wider stakeholders to share ideas, best practice and challenges to help step up the pace of change which will be crucial to achieve global climate goals.



Sustainability report

We remain committed to achieving the Greening Government Targets which include the following objectives (against a 2009-10 baseline):



32% reduction in overall carbon



Reduce landfill to 10% of total waste



Increase the proportion of waste that is recycled



Reduce paper consumption by 50%



Reduce water consumption

Internal Environmental report 2021-22

Ofgem remains committed to the Greening Government Commitments which have been updated with a new baseline, new targets and sub targets. The new targets are for the period 2021 to 2025. Below are the targets and what we are doing to achieve them.

Key changes to the GGCs compared to 2016 to 2020 are:

- Changing the target baseline year from 2009 - 2010 to 2017 - 2018, to accurately reflect the current government estate and ensure the government builds on the progress it has already achieved
- Setting more stretching targets on the core areas of emissions, water, waste and domestic flights
- Reorganising the targets into headline commitments and sub-commitments, so that departments can commit to common overall objectives.

We are only able to get utility data for our London office so that is what we report on.

Mitigating climate change: working towards net zero by 2050.

Headline target: Reduce the overall and direct greenhouse gas emissions from the Ofgem estate and its operations from a 2017 - 2018 baseline.

Since February 1st 2022 our headquarters office building, which we share with several government bodies, has been supplied with carbon free electricity. We are working with building management to change the hot water boilers, which account for 3% of total energy use, from gas to air source heat pumps which would make us carbon neutral.

Our Glasgow office was, at the time we occupied it the second most efficient office in the government estate (taken from the 2017-18 State of the Estate report) based on its energy performance certificate (EPC). Glasgow City Council, who own the building, have recently installed energy meters on our floor, and we expect that we will be able to account for our energy usage from this office in this report next year.

The lack of staff working in our offices and next to no travel has obviously reduced energy usage over the past two years. We have however not been idle over this period having introduced more energy saving measures into our offices such as lighting and lighting control upgrades and BMS upgrades, so we do not expect usage to return to previous levels.

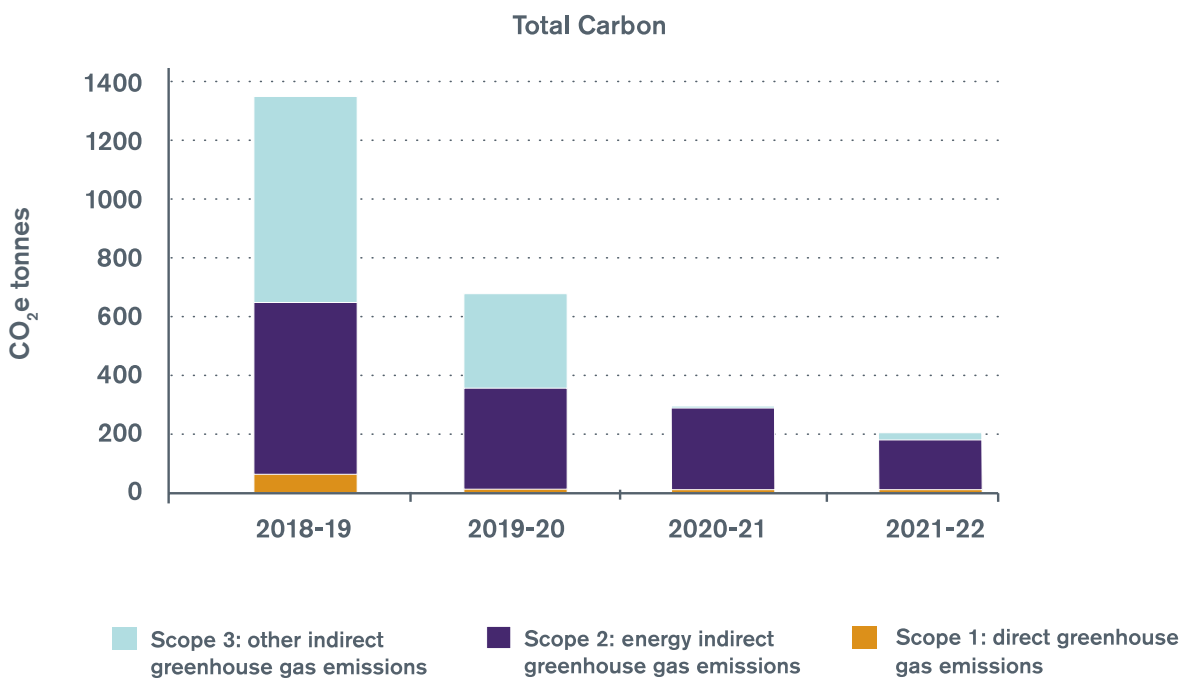
Sub-targets:

- Reduce the emissions from domestic business flights by at least 30% from a 2017 - 2018 baseline, and report the distance travelled by international business flights, with a view to better understanding and reducing related emissions where possible.

As with energy usage, travel carbon has been negligible during the past two years. We do not expect the travel carbon to reach its previous volumes. We do expect that our total carbon will be an almost 50:50 split between office energy and travel carbon.

Sub-targets:

- Update organisational travel policies so that they require lower carbon options to be considered first as an alternative to each planned flight
- We've updated our travel and expenses policy and made it very clear that lower carbon options such as rail are to be considered before higher carbon options, such as air travel, are used.



Greenhouse gas emissions		2017-18	2018-19	2019-20	2020-21	2021-22
Non-financial indicators (tCO₂e)	Total gross emissions	1176	1015	671	278	179
	Per FTE	1.28	1.43	0.92	0.23	0.14
	Total net emissions	613	1015	860	278	179
	Scope 1: Direct GHG emissions	153	49	7	6	5
	Scope 2: Energy indirect GHG emissions	736	431	330	273	174
	Scope 3: Other indirect GHG emissions	382	535	334	0	23
Related consumption data (kWh)	Electricity: Non-Renewable (k)	-	1,521	1,292	1,170	-
	Electricity: Renewable (k)	1,775	0	0	0	0
	Gas (k)	798	269	35	30	30



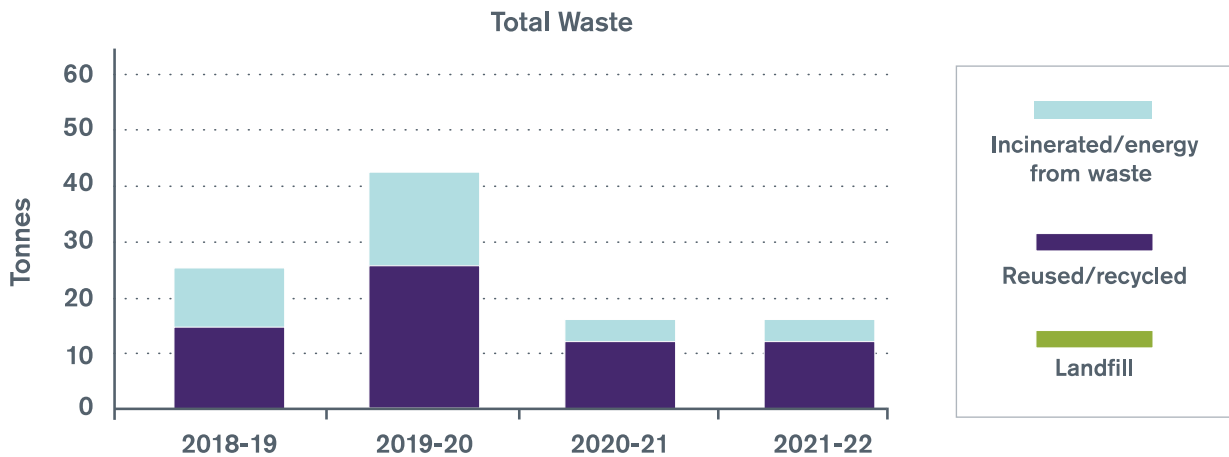
Minimising waste and promoting resource efficiency

Headline target:

Reduce the overall amount of waste generated by 15% from the 2017 - 2018 baseline. As can be seen by the graphs we have already achieved more than 50% reduction in waste. This reduction is mainly due to the pandemic, so we anticipate a sharp increase next year especially as staff numbers have significantly increased but softened by hybrid working pattern.

Sub-targets:

- Reduce the amount of waste going to landfill to less than 5% of overall waste
- Ofgem has been landfill free since 2010
- Increase the proportion of waste which is recycled to at least 70% of overall waste
- Ofgem achieved this target pre pandemic. We will be working to maintain it
- Remove consumer single use plastic (CSUP) from the central government office estate
- There are no single use plastic cups in any of our offices
- Measure and report on food waste by 2022, for estates with over 50 FTE (full time equivalent staff) and or over 500m2 floor area offering a food service
- No food waste was produced during the reporting period
- Report on the introduction and implementation of reuse schemes
- We are committed to a reuse furniture policies and are looking at circular paper
- Reduce government's paper use by at least 50% from a 2017 to 2018 baseline
- During covid there was almost no printing, but we do not expect to return to pre-covid print levels as we anticipate hybrid working will reduce the need to print. We have also reduced the number of printers available by 25%.



Waste		2017-18	2018-19	2019-20	2020-21	2021-22	
Non-financial indicators (tonnes)	Total waste	63.75	26	42	14	14	
	Total waste per FTE	0.05	0.04	0.05	0.02	0.02	
	Hazardous waste	0	-	-	-	-	
	Non-hazardous waste	Landfill	0	0	0	0	0
		Reused/Recycled	40	15	28	11	11
	Incinerated/ energy from waste	9	11	15	3	3	
Financial Indicators	Total Disposal Cost	£11,845	£9,798	-	-	-	

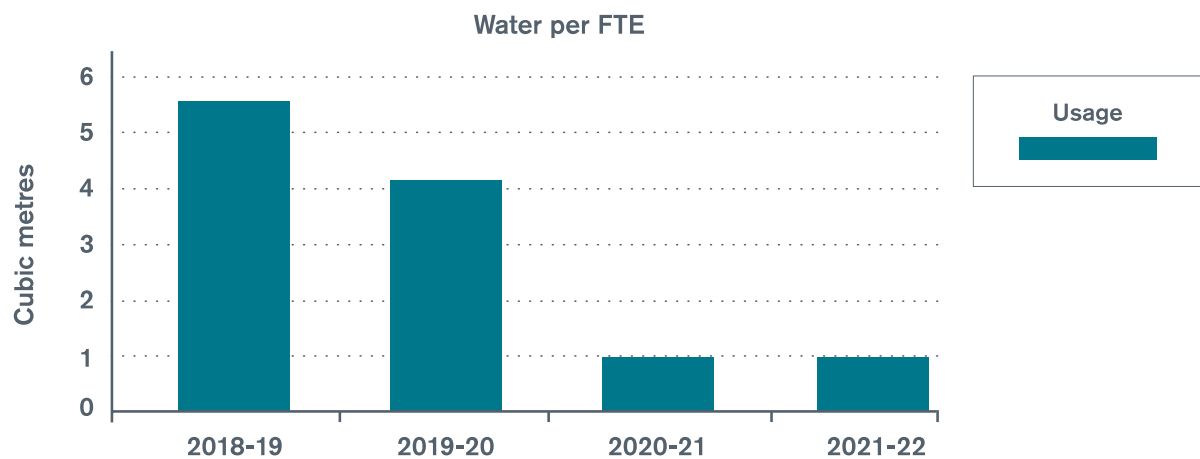
Reducing our water use

Headline target: Reduce water consumption by at least 8% from the 2017 - 2018 baseline.

As the graph below shows we achieved the **8% goal** prior to the pandemic. In our last non-covid year we had reduced our consumption by **47%**. We aim to continue to improve to less than **4 cubic meters** when everything returns to normal.

Sub-targets: Ensure all water consumption is measured.

- Already in place and reflected in the graph below
- Provide a qualitative assessment to show what is being done to encourage the efficient use of water
- Our London Office building has scheduled a water audit in early 2022 - 2023. Building management will be working with the results from that audit to further drive down water consumption.



Water		2017-18	2018-19	2019-20	2020-21	2020-22	
Non-financial indicators	Target	7.36	7.36	7.36	7.36	7.36	
	Water consumption (m ³)	Supplied	7959	3608	3875	896	896
		Per FTE	8.0	5.6	4.2	1.0	1.0
Financial Indicators	Water Supply Costs	£25,466	£8,444	-	-	-	



Procuring sustainable products and services

Headline commitment: Continue to buy more sustainable and efficient products and services with the aim of achieving the best long-term, overall value for money for society.

Departments will report on the systems they have in place and the action taken to buy sustainably, including to:

- embed compliance with the Government Buying Standards in departmental and centralised procurement contracts, within the context of government's overarching priorities of value for money and streamlining procurement processes
- understand and reduce supply chain impacts and risks.

As Ofgem buy the goods and services that apply to the minimum mandatory Government Buying Standard from the CCS framework agreements, then compliance with these standards are being met as the suppliers will have to have demonstrated meeting these standards as a minimum to be part of the CCS framework. Ofgem will also include additional sustainability questions in relevant tenders where possible.

Reducing environmental impacts from Information Communication Technology (ICT) and digital

Headline commitment: Departments should report on the adoption of the Greening Government: ICT and Digital Services Strategy and associated targets and ensure they provide membership to the Sustainable Technology Advice and Reporting team, who manage and deliver the Greening Government Commitments ICT reporting.

In summary, this will include delivering an annual ICT and digital footprint, waste and best practice data for each department and their partner organisations.

