Call for input

Energy System Cost Allocation and Recovery Review

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As we invest in the energy system transition, ensure a more resilient system and support electrification of the wider economy, the nature of the system's costs are changing. More of the costs that make up the bill will be 'upfront' capital costs, rather than 'ongoing' operating costs. That is why we believe it's the right time to look at the principles of how we allocate and recover this evolving mix of costs in the system to test whether there are fairer or more efficient ways to do it. With these system costs, some are majority owned by government, such as policy costs. Whereas others are majority owned by Ofgem, like network costs.

This call for input aims to set out the nature of the cost allocation and recovery 'issue', specifically in the context of how these system costs can be recovered from consumers. We explore different thematic options for how this can be approached. We then discuss how we can assess the options, particularly balancing complex trade-offs between considerations such as efficiency, fairness, practicality, net zero and economic growth.

We are seeking feedback and input from a wide range of stakeholders to help shape our considerations and policy development.

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Foreword

I speak to energy customers regularly, and I know that it remains extremely hard for many families and businesses to afford the energy they need. Though prices have come down from their highs during the gas crisis, they remain elevated and volatile.

In my view, this makes the case for changing our energy system for good - by diversifying our energy mix to provide a cleaner, more secure and resilient energy system - as strong as ever. As we make this transition, while we expect wholesale costs to come down, infrastructure costs will rise. Without change to how these costs are recovered, this could exacerbate inequalities that we see today.

We need a more enduring and strategic approach to standing charges and affordability, principally about how we allocate energy system costs in the best possible way. That is why we are launching this call for input as the first step in our Cost Allocation and Recovery Review, looking at the costs in the energy system and how they are allocated to consumers' bills from first principles.

We have heard loud and clear through previous consultations that many people feel current tariff options do not reflect how they actually use energy. We are already consulting on options to introduce more choice on standing charges, and in this review, we are looking at the underlying system cost allocation and recovery rules which ultimately flow down to consumer bills.

We want an open and honest conversation, seeking views about how costs are currently distributed across the energy system, and whether alternative models for recovering those costs could deliver better outcomes for consumers. This is aimed at creating a better approach to consumer bills that keeps up with changes in the energy system. Our work will also include looking at how we can ensure that those who are on the lowest incomes and that are struggling most are able to adapt to the system that we have.

The changes we are making to our energy system involve trade-offs which will not be easy. Inevitably there will be operational challenges that we must consider before any final decision can be made, and we will work closely with the government on the input we receive to help shape future proposals for change. However, the cause is momentous: to deliver the modern, secure, and sustainable energy system that will better protect energy customers.

Jonathan Brearley

Ofgem Chief Executive Officer (CEO)

1. Introduction and context

Why are we launching this review?

1.1 The energy system in Great Britain (GB) is changing, with maintenance investment and upgrades required to drive this transformation. To reduce our reliance on international energy markets, protect consumers from volatile energy prices and bills in future, and reduce the UK's contribution to greenhouse gas emissions, GB is transitioning away from an energy system that draws heavily on fossil fuels, such as coal and natural gas, to cleaner and more secure renewable energy sources like wind and solar. This investment in energy infrastructure will support a more resilient and well-maintained system and electrification of the wider economy.

1.2 We expect the structure of energy system costs to change as we invest in our system at pace to generate more clean power, boost energy security and resilience and support electrification of the wider economy. Fossil fuel-generated electricity typically has high ongoing costs, as each unit of electricity needs fossil fuel to be bought and burnt to generate power. Renewable electricity generation tends to have lower ongoing costs, as fuel doesn't need to be purchased, but renewable technologies tend to need more up-front investment. This transition will also require more investment in our energy network infrastructure if we are to meet our energy transition commitments, improve energy security and resilience, and maintain the system. For example, by upgrading the pipes and wires that will deliver energy to homes and businesses. We estimate that as much as £80 billion of investment in the electricity transmission network will be required out to 2031 to maintain and enhance energy security while enabling the transmission of more clean energy from renewable sources.

1.3 Some of these capital (or investment) costs are currently collected through the standing charge, which includes electricity network charges. Others, like renewable energy investment support schemes (for example, Contracts for Difference or CfDs), and gas network charges, are recouped through the unit rate. There are also specific government policies, funded by energy bill payers, to support delivery of the energy system of the future, for example to help people improve the energy efficiency of their homes, to provide affordability support for those on means-tested benefits, or discounts for certain businesses in the interests of driving growth. The costs of these schemes are generally allocated based on specific targets and obligations set on energy suppliers.

1.4 In return for our energy bill, we get a reliable energy system where we can switch the lights or heating on when we want. The costs of this need to be recovered.

1.5 Under existing arrangements, energy costs are paid for by users and consumers through their energy bills, with separate standalone bills for electricity and gas. These bills need to cover the costs of all the energy, infrastructure and activities that are required to deliver gas and electricity to consumers, which are then charged to both domestic and non-domestic consumers.

1.6 As the make-up of the energy system changes, and without further intervention, some areas where costs are expected to increase over time, such as electricity network costs, would drive an increase to standing charges in future. Although other parts of the bill, particularly wholesale costs, are likely to decline, these are recovered through the unit rate, not the standing charge. We have heard loud and clear the messages from many consumers that high standing charges, daily charges that apply regardless of how much energy a customer actually uses, are unpopular and perceived as unfair. This is against the background of many GB consumers facing affordability challenges, including in relation to their energy bills. Taking together the changes in the make-up of the energy system and these consumer views and wider context, we think now is the right time to review how the transition to a greener and more secure energy system should be paid for by consumers. This should reflect that energy is an essential service central to our lives and crucial to our economy.

1.7 We are also seeing a shift in the way consumers use energy. Historically consumers tended to use energy in quite a predictable way, whereas we are starting to see consumers use new technologies to generate their own energy (for example, via solar panels). Some consumers are automatically shifting their energy use through time, for example, using smart devices in their homes. Others are increasing their demand for electricity by shifting to electric vehicles (EVs) and heat pumps. These changes in technology and behaviour could offer the potential to create more efficient charging arrangements that create stronger incentives to reduce peak demand and waste less energy, which could potentially reduce costs for everyone over time. This creates an opportunity for consumer-led flexibility to play a critical role in delivering an efficient, low-carbon system. However, these new technologies can also potentially lead to circumstances where those that have them could avoid paying for some energy system costs, which would then need to be paid for by other consumers.

1.8 Consistent with our statutory duties, our aim is for, but not limited to, the cost of providing energy to be allocated and recovered efficiently and in a way that protects consumers, whilst supporting decarbonisation and economic growth. We've launched this 'Energy System Cost Allocation and Recovery Review' to ensure we have a robust understanding of the changing nature of costs that will make up future energy bills, how those costs are currently recovered from consumers, and whether different approaches are possible that might better protect energy consumers during the transition to a greener and more secure energy system, while supporting economic growth.

1.9 We are open to considering a wide range of different approaches for allocating and recovering costs. This includes consideration of how different approaches would feed through to the structure of costs that suppliers face, and how they are passed onto consumers through tariffs and bills, including the role of the retail price cap. We therefore expect the outcomes of this review to focus on how the underlying costs are passed through to consumers. Some options may be simpler and quicker to implement than others. For example, varying costs based on the volume of energy used is a principle that already exists now in the system more generally and in relation to consumer tariffs. Alternatives, such as allocating system costs on metrics such as time of use or ability to pay, would be a bigger step change relative to current arrangements. This call for input (CfI) describes the types of options we could possibly explore further. The specific policy options we identify to assess in more detail will be subject to further evidence and assessment, including feedback from this consultation.

1.10 Alternative models to allocating and recovering costs already exist in other markets. For example, mobile and broadband telecoms predominantly operate on a single standing charge model, with a flat price per month with additional charges for extra use or features, like increased connection speed or using a mobile phone abroad. In rail transport, consumers face charges based on the time of their travel through peak and off-peak ticket pricing. Charges like Council Tax are levied on 'wealth', using a home's value as shorthand for a household's ability to pay. All these options come with trade-offs and practical challenges when implementing, which we will need to consider as part of our assessment of options for what may be possible within the energy sector.

1.11 In summary the typical energy bill comprises four broad categories of cost:

1) **Wholesale costs**: The cost of the fuel and infrastructure that produces it (these costs vary over the day, tending to peak when demand is highest in the evening);

2) **Network costs**: The cost of the network infrastructure that moves energy from where its produced, to where it's needed;

    i. **Physical network infrastructure**: The costs of pipes and cables.

    ii. **Balancing the systems**: The cost that System Operators (SOs) face when trying to balance supply and demand, ensuring continuous security of supply, or costs related to system congestion.

3) **Supplier operating ('retail') costs**: The cost of providing energy and services to individual consumers, like billing, call centres, metering etc; and

4) **Policy costs**: The cost of government schemes to drive energy efficiency, provide affordability support and support new technologies.

1.12 Taken together, we refer to these costs in aggregate for the purpose of this document as 'energy system costs'. As we move towards a clean power system, the size of the infrastructure elements of the costs of the system will increase. Some of these infrastructure costs are funded through network costs, but others will be funded through policy costs. This is because the cost of renewable generation infrastructure is funded by a combination of wholesale costs and CfDs, which we include in policy costs. Not all infrastructure is recovered through the standing charge. Under current charging arrangements, the investments in the electricity transmission network will be recovered through the standing charge, whereas the cost of renewable generation infrastructure investment is recovered through the unit rate.

1.13 The size of these costs will be affected by a number of factors, including but not limited to the amount of energy demand. Demand for energy also varies significantly over the day and between seasons. Demand currently tends to peak in the evenings (normally around 4-7pm on weekdays), on cold winter days or when weather patterns impact renewable output. The energy system is built to serve this peak demand, so if consumers (domestic and non-domestic) shift their consumption to less peaky times or when there is less supply, this can reduce the total size (and cost) of the energy system needed to meet peak demand over time. Annex 1 provides more information on these costs, including how they are currently recovered from domestic and non-domestic consumers, and how we expect these costs to evolve as GB transitions to a cleaner and more secure

energy system. Chapter 2 summarises the results of our initial consumer research and highlights key examples of changes to energy system cost recovery approaches from overseas.

1.14 When it comes to recovering energy system costs from consumers, there are some fundamental choices that can be made about how costs are shared. In our existing market arrangements, these choices are not made by one body, but sit across both Ofgem and the government. These choices include:

a) What is recovered from energy bills vs. general taxation;

b) For costs that are on energy bills, we then have choices around:

i. How they are allocated across gas and electricity bills;

ii. How they are allocated and recovered between domestic and non-domestic consumers. For example, whether one group should pay more or less for the system costs;

iii. How they are allocated and recovered within these two broad groups. This could be based on an ability to pay for domestic consumers, or different charges for different business sectors. It could also be based on more technical criteria, such as the amount of energy used, usage at peak times or the potential capacity to use energy.

c) Whether to provide additional targeted support for those who need it, that results in costs with a fair and acceptable distribution across consumers. This could be via a bill support or direct benefits for domestic consumers, or discounts for specific non-domestic customers or energy intensive users.

1.15 Some of these decisions sit solely with government, such as (a) and (c). But others will depend on various factors such as the specific system cost. We are working closely with government to ensure we take an overall coherent approach to the allocation and recovery of energy system costs.

1.16 Some decisions, such as how costs are shared through bills or taxes, or who gets extra support, are rightly for the elected government and not Ofgem. However, many choices are made jointly by government and Ofgem, shaping what goes into energy bills and how costs are recovered from consumers. Ofgem's role is to protect all consumers, both now and in the future, and for that reason we are keen to ensure that we look at bills in the round, considering all the costs and options available and how these feed through to consumers.

1.17 There are also a series of more detailed choices about how energy system costs are recovered from energy bills via the way in which those charges are structured:

a. **How charges vary with the amount of energy used:** To date, the typical domestic GB charge has been a 'two-part tariff', comprising a fixed charge and unit rate. For non-domestic consumers, this structure and balance begins to vary as consumers use more energy. Compare this to other sectors – for example subscription style pricing models where nearly all the charges get bundled into a fixed monthly charge, with extra charges for use over and above a certain limit (for example, mobile phones, entertainment platforms). Other goods are priced purely based on usage or unit rates, with no fixed cost element (for example, petrol and groceries).

b. **How charges vary with time of use:** For example, time banding (such as peak pricing train tickets) or pricing that reflects demand and supply at that point in time.

c. **How do the charges vary with the location of use:** For example, for electricity distribution networks, there are different charges for each region that reflect the different conditions there. In other sectors, charges for the provision of water and wastewater services vary across regions, based on the different costs of providing services in each region. By comparison, the cost of a postage stamp is fixed across the country.

d. **How charges vary with ability to pay:** For example, council tax depends on house values, which can be a proxy for wealth. Or means tested tariffs and subsidies.

1.18 Chapter 3 draws on these choices to identify possible options to recover energy system costs from domestic customers. We welcome stakeholders' views on which specific policy options we should explore in more detail as part of our review. Whilst we don't identify specific options in relation to:

a. recovering system costs from non-domestic consumers; or

b. methods for allocating system costs between the domestic and non-domestic sectors.

1.19 We welcome views from stakeholders on whether we should explore changes to the current approaches and methods for allocating costs to non-domestic consumers as part of this review.

1.20 Finally, chapter 4 sets out our initial thoughts on the assessment framework we should use to evaluate options, the evidence we should draw on and how trade-offs can be assessed.

Related policy areas and themes

1.21 This review does not replace any existing and related work, and we're working closely with government to ensure coherence with wider policy work. Related policy areas include:

- **Standing charges:** In February 2025, we asked for people's views on introducing a zero standing charge variant to the default tariff cap. We subsequently published an update in July on options for mandating a low or zero standing charge tariff option in the competitive market. The Cost Allocation and Recovery Review builds on that work, including by looking at all system costs and by exploring changes to cost allocation and recovery methods.
- **The Review of Electricity Market Arrangements (REMA):** REMA was established to ensure electricity market arrangements support a decarbonised, cost-effective, and secure electricity system fit for the future. In July 2025, the government announced that it will retain a single national, GB-wide, wholesale market pricing regime and will deliver a package of national reforms. This package of national reforms aims to deliver a more strategic and co-ordinated approach to the energy system, provide stronger signals for efficient siting of new assets and improve overall operational efficiency, whilst also increasing stability and certainty for investors. The government plans to publish a Reformed National Pricing Delivery Plan later this year, including a timeline with key activities for implementing reformed national pricing.
- **Network charging with location-based signals:** An important element of the government's decision to reform a national wholesale electricity market is to reform network and connection charges so that they guide demand and supply sources to locations where grid capacity is likely to be available at the time they are likely to connect. Following the government's decision on REMA, we published an open letter to set out our initial thoughts on how electricity network charging signals could be reformed to provide greater predictability and align with strategic plans.
- **Clean Flexibility Roadmap**: In July 2025, government published their Clean Flexibility Roadmap. This is a blueprint for how government aims to deliver the

clean flexibility capacity required for clean power by 2030 and net zero by 2050, as part of our Clean Energy Superpower Mission. The scope of the Roadmap includes both short and long duration flexibility technologies. Broader policy areas such as market reform, network connections and digitalisation are also included in the Roadmap as critical system-wide enablers, to boost flexibility capacity.

- **Industrial Strategy**: The Department of Business and Trade (DBT) published the Industrial Strategy at the end of June. For energy, the strategy targets non-domestic electricity costs, timely grid connections, investment in clean energy and strengthening connections to the European Union (EU) energy market. These aims should in turn support energy security. Specific policies that are related to our review include increasing support for energy intensive businesses through the British Industry Supercharger package (via an uplift of the Network Charging Compensation from 60% to 90%), an outlined new policy called the British Industrial Competitiveness Scheme that will expand electricity price support to manufacturing electricity intensive frontier industries in their core sectors and considering wider energy market reform. We expect DBT to consult further on the details of these policies.
- **Gas system call for evidence on network investment and affordability:** This Autumn, the government intends to publish a call for evidence on gas network investment and affordability. It will seek views on alternative investment recovery options. This will not cover standing charges but will focus on recovering network charges that are a result of investment and maintenance of the gas distribution and transmission network.

1.22 We have also published our latest domestic consumer insights alongside this CfI. This consumer research covers our latest findings from the omnibus consumer survey, as well as the domestic consumer deliberative research we have conducted as part of this review.

Responding to this call for input

1.23 This CfI will be open to responses until 24 September 2025. We invite stakeholders' views on any aspect of the issues raised in this paper and in particular on the questions asked. Questions are included in the relevant section and a full list of consultation questions is included in chapter 5. Responses to be sent to Cost Review costreview@ofgem.gov.uk

Your feedback

1.24 We believe that feedback is at the heart of good policy development. We are keen to receive your comments about this report. Please send any general feedback comments to Cost Review costreview@ofgem.gov.uk. We'd also like to get your answers to these questions:

1) Do you have any comments about the overall process of this report?
2) Do you have any comments about its tone and content?
3) Was it easy to read and understand? Or could it have been better written?
4) Are its conclusions balanced?
5) Did it make reasoned recommendations for improvement?
6) Any further comments?

1.25 In accordance with our consultation policy, we might publish non-confidential responses on our website. If you'd like the whole or any part of your response to be kept confidential, please mark those parts as such. If possible, put any confidential material in separate appendices marked 'confidential'.

2. Consumer research and international examples

This chapter summarises the findings of our initial domestic consumer research and highlights some of the international energy examples we have explored to date.

We welcome stakeholders providing information and evidence, as well as their own analysis in response to this CfI, including by highlighting examples in other markets (including but not limited to energy) that we should consider.

Domestic consumer insights

2.1 Consumer research is an important component of our evidence base, and our understanding of how we can develop policy that creates the best outcomes for consumers. In this chapter we provide an overview of some of our domestic consumer insights and research. We have recently published research on domestic consumers' views on energy pricing, with this work summarised here.

Omnibus survey

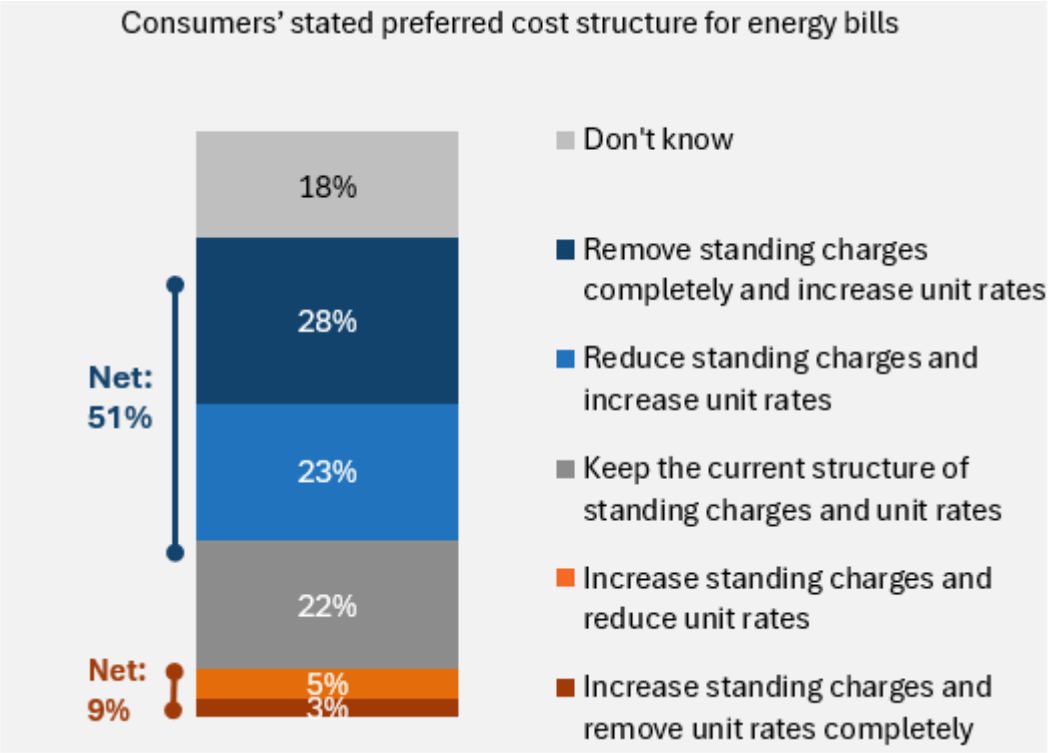
2.2 The purpose of this survey was to understand domestic energy consumers' top-of-mind views towards energy pricing structures. Annex 2 provides details on how this has been conducted, including sample sizes.

2.3 When asked how fair they considered standing charges are as a way of charging for energy, 62% of participants said they thought they were somewhat/very unfair, while 19% said they thought they were somewhat/very fair. By contrast, when asked how fair unit rates are as a way of charging for energy, 54% said they perceived them to be somewhat/very fair, while 23% said they deemed them somewhat/very unfair. Those consumers who are older, those in lower C2DE social grades (for example skilled, semi-skilled and unskilled manual occupations), and those on a lower income (household annual income lower than £55k per year) were all more likely to say they consider standing charges to be unfair.

2.4 Participants were then asked for their preferences given a trade-off between increasing standing charges and decreasing/removing unit rates (and vice versa). As shown in Figure 2 below, stated preferences leaned more towards removing or reducing standing charges and increasing unit charges, or keeping the current structure, rather than reducing/removing unit rates and increasing standing

charges. Nearly 3 in 10 (28%) said they would prefer to remove standing charges completely and increase unit rates, while 23% said they would prefer to reduce standing charges and increase unit rates. 22% stated a preference for keeping the current structure of standing charges and unit rates. However, a significant proportion (18%) said they don't know.

Figure 2: Consumers' stated preferred cost structure for energy bills, January 2025



Source: Ofgem, Pricing Omnibus Survey. Research conducted in January 2025. 3,571 GB domestic energy consumers took part in an omnibus survey delivered by Ipsos.

Domestic consumer deliberative research

2.5 While the omnibus survey reveals consumers' top of mind views towards energy pricing, participants were not provided with an opportunity to consider the costs and benefits of each option and any trade-offs. To explore consumers' considered views, Ofgem undertook additional deliberative research with the agency Thinks Insight and Strategy. This seeks to understand the public's values and explore how they make difficult trade-offs, after weighing up different evidence and information. The participant sample included consumers from across Great Britain, ensuring diversity in terms of key demographics, energy payment methods, tariff types, suppliers, and vulnerability status. Participants undertook pre-work before

joining the sessions to understand their baseline understanding of key energy issues.

2.6 'Affordability' was the number one priority for participants when considering the future of energy pricing and tackling this challenge was typically viewed as essential before turning attention to other issues. Participants consistently set out their support for the creation of a 'fair' system, with a strong desire to protect vulnerable consumers. Many felt that they wanted to see support come primarily through government but there were very low levels of awareness about current government schemes to support vulnerable consumers.

2.7 Participants tended to intuitively favour a simpler and more predictable system over one that gave them more control but with greater variability of costs, primarily because such a system could leave vulnerable groups behind. However, participants recognised a more 'control'-led system could drive positive behaviours and save consumers money if they engaged. Finally, consumers were broadly enthusiastic about investing in innovation and were, in principle, willing to pay for it. Recognising that investing now in innovative technologies and approaches could pay dividends (in terms of lower bills) in the future. However, there were significant issues of trust in relation to energy companies and the government, and Britain's poor record on infrastructure was often cited. Therefore, consumers wanted assurances that innovative projects would be delivered on time and to budget, with savings passed onto consumers. With these assurances in place, participants were far more supportive of investments in innovation.

Cost allocation online experiment

2.8 This experiment was conducted to see how the direct presentation of trade-offs between standing charges and unit rates, alongside information provision, influenced consumer attitudes and behaviours towards recovering fixed costs. One key aspect was a cost allocation task, where participants were asked how much they would ideally set standing charges as. The experiment allowed for trade-offs to be shown to respondents in real time, as they decreased standing charges, unit rates would increase and vice versa. For more information on the methods used please see Annex 2.

2.9 Over half of participants (approximately 50%) rated standing charges as unfair, compared to fewer than 25% who felt the same about unit rates. Overall, the majority of participants (58%) preferred to reduce standing charges. 17% of

respondents chose to keep standing charges the same, and 25% opted to increase standing charges.

2.10 When participants were presented with information of the impact of reducing or increasing standing charges on unit rates and then asked whether they would how they would change standing charges, we saw fewer consumers wanted to fully remove standing charges (11% versus 28% in omnibus) and far more consumers wanted to increase standing charges (25% versus 9% in omnibus). This may be because this task provided more detailed information about the trade-offs between standing charges and unit rates which could reduce the strength of opposition towards them. The lack of a 'don't know' option also could have led to more moderate results.

2.11 Providing more information on the reasons behind standing charges lead them to be perceived as slightly less unfair (4% point reduction) and slightly fairer (5% point increase). Participants with lower energy use were more likely to perceive standing charges as unfair. Higher energy users also allocated significantly more to standing charges. However, even when told reductions to standing charges would raise their bills, most participants still preferred a small decrease in them.

Further research

2.12 We have initially identified areas where we intend to do further research. These include:

1) **Consumer tariff trial**: We have published an open letter for engagement on Ofgem's upcoming 'Split Standing Charge Tariff Trial' multi-part tariff. This trial aims to explore whether linking daily standing charges to capacity usage can encourage consumers to shift usage away from peak times. This supports reducing system costs, providing consumers with more control, and unlocking domestic flexibility at scale.

2) **Ongoing consumer surveys**: We will continue to engage with consumers and their opinions via our regular consumer surveys.

International examples

2.13 As part of our initial research, we have looked at comparable energy markets around the world, including the Swedish, Californian and Australian electricity markets. We have seen a range of different options being pursued in relation to the allocation and recovery of energy system costs from consumers. However, a

consistent theme was that no simple or single policy solution exists – all the available options require trade-offs, including between efficiency, affordability and simplicity. Below we summarise some of the key findings from these international examples.

Sweden

2.14 We have looked at electricity market arrangements in Sweden where there are some similarities to the GB market, and as well as notable differences. Like GB, Sweden has large amounts of electricity generation in the northern parts of the country which then needs to be moved to demand centres in the south. However, the consumer supplier interface is different to GB. There are approximately 160-170 electricity network companies in Sweden, who effectively act as electricity suppliers as well. Further, the regulatory framework provides the core principles of charging and cost recovery. However, it is up to the network companies to apply these and come up with the detailed tariff structures.

2.15 In March 2022, the Swedish Energy Markets Inspectorate (Ei) implemented new regulations regarding the design of electricity network tariffs. The rules aim to promote efficient network use and cost-reflective pricing for domestic consumers, thus help to ensure Sweden's electricity needs can be met at the lowest possible cost. The network companies are responsible for applying the new rules to calculate their tariffs. The new regulations will be implemented by January 2027 at the latest and state that electricity tariffs need to be composed of four parts:

1) **An energy fee:** The fee is charged in relation to the cost of electricity transported in the electricity network, and is based on costs that vary with the customers' use of the network in the short run (for example, network losses). The fee can also be time-differentiated, which means that it can be divided into high- and low-price time over the day;

2) **A (time-differentiated) capacity fee**: This fee is time-differentiated and should be cost-reflective. This means that it must be different at different times to reflect how the load on the electricity grid varies over time. As a result, it provides a price signal about future network costs that reflects costs of capacity-enhancing measures, such as building new network. Consumers can therefore receive a higher or lower cost depending on their behaviour (for example, lower costs if they reduce demand at peak times);

3) **A customer-specific fee**: The customer-specific fee is based on the costs of metering, billing, and broader customer services to a specific customer or customer group. It is set as a fixed amount per customer;

4) **A fixed fee**: This covers 'residual costs', which represents the difference between the amount of revenue a company has received, and the amount they are allowed to receive. This should be perceived as a fixed fee, and not affect investment or consumer demand. It's charged to consumers based on the size of the main fuse, and capacity, at their home.

2.16 Sweden's four-part tariff structure aims to ensure transparency and cost-reflective fees that create incentives for efficient use of the network. It pursues this goal by encouraging consumers to adjust usage patterns, promoting a more stable and efficient electricity network. The regulatory approach in Sweden also expects the grid operators to plan and invest in infrastructure, supporting long-term sustainability.

California

2.17 We have also considered market arrangements in California. California is divided into Northern and Southern regions, and each utility company is assigned an electric utility service area. Unlike in GB where the market is fully liberalised, California's market is partially liberalised with companies either Investor-Owned Utilities which are privately owned by shareholders and regulated by the California Public Utilities Commission (CPUC), or Publicly Owned Utilities which are owned by local governments and public agencies. These are governed by local boards, not regulated by CPUC. The electricity market in California has higher levels of solar generation compared to GB. This is creating cost allocation and recovery issues as consumers with household solar and batteries may contribute less to fixed costs in the system as they can generate their own electricity. However, it may then leave a smaller group of customers (without access to solar and battery) paying for the system's fixed costs.

2.18 California provides discounts on electricity and natural gas bills to income-qualified households through its CARE and FERA programmes. The discount received by domestic consumers is dependent on their total household income and linked to the Federal Poverty Guidelines. Consumers must apply for the programmes via their energy supplier with the programmes being funded by a rate surcharge paid by all other utility consumers. We're aware that accurate data collection regarding a household's income level is a significant challenge. To

address this, CPUC are considering working with a state of California food assistance programme, which also requires income verification as part of its enrolment, to automatically enrol recipients into the energy bill discount programmes to ensure eligible consumers also receive the energy bills discount.

2.19 On 9 May 2025, CPUC approved proposals to reduce the price of residential electricity through a new billing structure, which it hopes will support the transition away from fossil fuels. This billing adjustment introduces a flat rate bill component and reduces the electricity usage rate, meaning some of the fixed costs in the system will be recovered via the new flat rate. Customers enrolled in the low-income assistance programmes referenced above will benefit from a discounted flat rate. The new billing structure does not introduce any additional fees or generate extra profits for utilities. Instead, it redistributes existing costs among customers.

Australia

2.20 As well as considering the Swedish and Californian market arrangements, we have also considered Australia. There are similarities between the UK and Australia in that both countries have a concentrated supplier base, with smaller retailers gradually increasing competition. However, whilst the UK market is highly centralised and fully liberalised, Australia's federated market varies by state. Although the National Electricity Market (NEM) covers most regions, there is a mixture of public and privately owned companies that vary by state. Like California, the Australian markets are also characterised by relatively high levels of domestic solar generation. Deployment of new technology such as solar and batteries creates opportunities and risks. They may help consumers reduce their contribution to network bills. However, this may result in transferring their share of fixed network costs onto other consumers. This scenario creates related but different cost allocation and recovery considerations compared to GB. For example, cost avoidance driving up fixed costs for other consumers, compared to large infrastructure investment driving fixed costs.

2.21 Three Australian states, South Australia, Victoria, and Queensland, recently reformed their network tariffs to improve cost reflectivity, particularly for businesses. Changes included introducing time-of-use pricing and capacity-based charging models. These changes were also automatically applied to domestic consumers with smart meters, alongside Australia’s smart meter rollout. This resulted in some domestic electricity consumers in Australia experiencing increased costs due to time-of-use pricing structures. The tariffs, implemented to

encourage more efficient energy consumption, has led to higher bills for those who are unable to adjust their usage patterns to off-peak times. These reforms have been poorly received by non-domestic consumers who did not actively choose a time-of-use tariff.

2.22 On 25 July 2024, the Australian Energy Market Commission (AEMC) self-initiated a broad, forward-looking review of Australia's electricity market. With solar panels, batteries, EVs and neighbourhood batteries becoming increasingly commonplace in Australia, the AEMC is examining how Australia's electricity pricing needs to evolve to ensure that its pricing frameworks keep pace with how consumers use and interact with the energy system and there is an efficient and equitable approach to sharing the costs of the distribution network amongst all energy consumers.

Question 1: What other examples or evidence from relevant sectors or international energy markets should we consider as part of our review?

3. Options

In this chapter, we set out some broad options for changing the way in which energy system costs could be recovered from domestic consumers. Many of these stylised options could be combined or tailored to develop more specific policy options for further consideration and assessment.

Whilst we don't set out options, we are open to exploring alternative approaches and methods to: recovering energy system costs from non-domestic consumers; and allocate costs between the domestic and non-domestic customer segments, if alternative approaches would be in consumers' interest.

Our aim is to explore options that could better protect energy customers during the transition to a greener and more secure energy system, while supporting economic growth.

Options to recover energy system costs from domestic consumers

3.1 At present, wholesale costs, most policy costs and costs to balance the network are recovered from domestic consumers via volumetric charges. The majority of costs associated with investing in and maintaining the physical electricity network are recovered from consumers as a fixed cost, via the standing charge.

3.2 As set out in chapter 1, there are several broad options for amending the structure of charges and therefore the way in which energy system costs are recovered from domestic consumers. In this chapter we explore a range of thematic options for making changes to the ways that energy system costs are allocated to and recovered from consumers.

3.3 Any specific decisions taken by Ofgem to change the way energy system costs are allocated to, and recovered from, consumers will need to be consistent with our statutory duties and the overall legislative framework. We are deliberately keeping the option set open at this stage to seek views and evidence from stakeholders in response to this CfI, so we can then focus our detailed assessment on a shorter list of options for a subsequent policy consultation.

3.4 We acknowledge that our assessment of these options will also be affected by decisions taken by government. We are working closely with government to ensure we take an overall coherent approach to the allocation and recovery of energy system costs.

3.5 Below we set out initial, high level of options by theme, demonstrating how cost allocation and recovery could be amended to address different challenges.

A. **How charges vary with the amount of energy used:** To date, the typical domestic GB charge has been a 'two-part tariff', comprising a standing and volumetric charge. Compare this to other sectors – for example subscription style pricing models where nearly all the charges get bundled into a fixed monthly charge, with extra charges for use over and above a certain limit (mobile phones, entertainment platforms). This compares to other goods, which are purely based on usage, with no fixed cost element (for example, petrol and groceries). The options below cover both volume and system use.

    1) **Option A1**: standing charge based on maximum use
    2) **Option A2**: reduced standing charge, greater recovery from the unit rate
    3) **Option A3**: no standing charge, recover *all* system costs from a single unit rate
        i. **Option A3(i)**: unit rate is a falling block tariff
        ii. **Option A3(ii)**: unit rate is a rising block tariff

B. **How charges vary with time of use:** For example, time banding (such as peak pricing train tickets) or pricing that reflects demand and supply at that point in time.

    1) **Option B1**: standing charge linked to use at peak times
    2) **Option B2**: lower standing charge, offset by higher unit rates linked to use at peak times

C. **How charges vary with the location of use:** For example, charges for the provision of water and wastewater services vary across regions, based on the varying costs of providing services. Whereas the cost of a particular type of postage stamp is generally fixed across the country.

    1) **Option C1**: Standing charges vary regionally, reflecting different costs and signals
    2) **Option C2**: Standing charge applies consistently to all GB regions

D. **How charges vary with ability to pay**: For example, if a progressive approach was desired, then energy system fixed costs could be allocated and recovered (pre-distribution) based on a proxy for wealth. For example, council tax is funded in this way.

    1) **Option D1**: Income-based standing charge
    2) **Option D2**: Wealth-based standing charge

3.6 The above menu of example options can be modified and combined in multiple different ways - for example into a three- or four-part charge, which includes a fixed, unit, and capacity and time of use charge.

Question 2: What options for amending domestic cost allocation and recovery should we explore in more detail and why? What options should we rule out at this stage and why?

Question 3: How would changes to the underlying rules and approaches for allocating and recovering system-wide costs be expected to translate into the tariffs offered by suppliers?

Options to recover energy system costs from non-domestic consumers

3.7 At present, wholesale costs, policy costs and costs to balance the network are recovered from non-domestic consumers via volumetric charges. The majority of costs associated with investing in and maintaining the physical electricity network are recovered from non-domestic consumers via a set of banded fixed charges that increase with the size of the business.

3.8 The amount of money allocated to a band relates to the volume consumption of the users in it, which is consistent with how costs are allocated between the domestic and non-domestic segments. How users are allocated to bands is slightly more complex and reflects different availability of data for different users. Small distribution connected sites who do not have agreed capacity with their distribution network, that is to say they have not agreed and reserved an allowed level of capacity on the network, are allocated to bands based on their consumption. Larger users with agreed capacity are banded using this capacity, as capacity tends to be a major cost driver of distribution networks that reflects the investment that has had to be made to provide the service to the users. The largest transmission-connected sites are banded by their consumption, as capacity information is not available for the transmission network. A key feature of banded charges is that all users within a band face the same charge.

3.9 These arrangements are the result of recent changes implemented following our Targeted Charging Review (TCR). Following concerns about users' ability to avoid charges, the top-up charges for distribution were moved in 2016 from peak-time volumes to all consumption. Further change took place in 2022/23 when transmission and distribution charges were all moved to a fixed basis based on

capacity, rather than utilisation. This moved away from a transmission charging model that was based on peak-time use, again following concerns about how avoidable the model had become. This aimed to ensure all parties connected to the network made a fair contribution to the fixed costs by preventing actions that could reduce their exposure to this part of the charge.

3.10 The strong feedback from consumers we have received in recent years relating to standing charges mainly relates to the domestic sector. However, non-domestic consumers have also provided feedback on how current cost allocation and recovery arrangements have affected them. Changes to charging arrangements as a result of the TCR have meant fixed costs have increased for some non-domestic consumers, particularly for larger distribution-connected sites, as the charging bands for fixed costs are based on voltage level and agreed import capacity. Some non-domestic consumers have also highlighted how the TCR changes, which led to a large reduction in the incentives present in the Triad arrangements for calculating some network charges, has led to increases in the charges they receive. We are also aware of the challenges non-domestic consumers in GB face in relation to relatively higher (compared to similar economies) electricity costs. This risks disincentivising electrification in the non-domestic sector, as well as impacting wider competitiveness.

3.11 The government has recently published its Industrial Strategy and its Clean Flexibility Roadmap. The Industrial Strategy announced an increase in support for energy intensive businesses through British Industry Supercharger package through an uplift of the Network Charging Compensation from 60% to 90%. This is in addition to existing support government provides to eligible energy intensive business. Government will also publish its industrial decarbonisation strategy in 2026. We are therefore interested to hear from stakeholders whether there are options we should consider that would benefit consumers, for example, by supporting economic growth, decarbonisation and the further provision of flexibility in the non-domestic sector.

3.12 Both sets of concerns set out by domestic and non-domestic consumers outline the complex trade-offs between options, and how costs are allocated and recovered between different consumer groups.

3.13 We would like to understand the nature of the non-domestic sector in more detail. When responding to the question below, we would encourage stakeholders to consider when and how non-domestic consumers use their energy. We would also like to understand how cost allocation and recovery methods could impact their

decisions to decarbonise and participate in flexibility. Responses may also consider barriers or incentives.

Question 4: What options for amending non-domestic cost allocation and recovery should we explore in more detail and why? What options should we rule out at this stage and why?

Options to amend the split of energy system costs recovered from the domestic and non-domestic sectors

3.14 At present, wholesale, policy and network balancing costs are recovered from consumers via volumetric charges. The majority of costs associated with investing in and maintaining the physical electricity network are recovered from consumers as a standing charge, with different methods utilised in each of the domestic and non-domestic segments. These costs are split between the domestic and non-domestic sectors based on the relative volumes of each sector, resulting in a broad split of 40% for domestic, and 60% for non-domestic.

3.15 Whilst we do not have specific options in mind, we are open to suggestions from stakeholders on whether we should consider alternative methods for allocating these costs between the domestic and non-domestic sectors, if such alternative methods would benefit consumers.

Question 5: Should we consider alternative methods for splitting network costs between domestic and non-domestic consumers? If so, what methods should we consider and why would these alternative methods benefit consumers?

Key issues and trade-offs

3.16 The purpose of this CfI is to seek feedback and evidence from stakeholders to help us develop a shortlist of more specific policy options for further consideration and assessment. As we are not proposing specific policy proposals at this stage, we have not sought to provide a detailed assessment of each option and are instead seeking stakeholder views on our proposed assessment framework, the key sources of evidence we should use and how we should assess key trade-offs (see the next chapter for more on this). That said, this section highlights some of the key issues and trade-offs associated with the different types of options that have been identified above.

Amount of energy used

3.17 Models linked to system use might include a greater emphasis on volumetric charges. We recognise, as set out in chapter 2, that some stakeholders consider volumes to be a more intuitive or fairer way of apportioning costs. There are practical benefits to a model based on volumes, as consumption data is available for all users. Drawbacks include potentially larger changes in the charges of users compared to the current approach, and the lack of a clear link to aggregate volumes in the drivers of the infrastructure investment needed in the system, where capacity tends to play a greater role. Further, recovering all the system costs through variable charges may distort and dampen signals for consumer-led flexibility. Charges based on usage could also result in more wealthy consumers with solar panels, for example, avoid making proportionate contributions to the network, which is built to serve peak demand when the sun is unlikely to be shining. This could result in a smaller group of consumers, without access to solar, paying for the system's fixed costs. Usage based charges could also penalise consumers who have unavoidably high usage, for example, those with a health condition that rely on high usage, such as needing a dialysis machine.

3.18 Greater emphasis on total capacity (maximum use) as a cost driver is another option, and one that relates to the investment of the system more directly (which is built to serve peak demand). However, this kind of charge could be perceived to undermine the decarbonisation of the transport and heat sectors, by disincentivising domestic consumers to switch to EVs and heat pumps and disincentivise non-domestic consumers to decarbonise industrial processes. It might also be more complex to implement if users without smart meters and the largest users do not have capacity data, so data would need to be made available or estimates or proxies used.

Reduced levels or removal of standing charges

3.19 As a regulator, we cannot make energy system costs go away and so if we were to explore options that involve smaller or no fixed charge as part of our cost allocation and recovery review, the relevant costs would need to be recovered from customer via some other charge, for example, the unit rate.

3.20 In our February zero standing charge consultation, we set out options for a zero standing charge variant of the price cap that consumers could choose to opt-in. In our July update, we set out options for mandating a low or zero standing charge tariff option in the competitive market. We are keen to bring about an increase in choice and control for consumers about how standing charge costs are paid

sooner than what would be possible via the price cap, with the cost allocation and recovery review providing a more enduring solution.

3.21 A low or zero standing charge tariff could bring benefits for some consumers, providing them with more choice and control about how they pay for their standing charge costs. These tariffs will more closely reflect changes in customer consumption and will allow consumers more control of their energy bills. We note that there may also be circumstances where domestic consumers would get personal benefit from a low or zero-standing charge, even if they may not be financially better off over a year. For example, prepayment consumers are more likely to manage their household budgets on a week to week or month to month basis. We have heard that many households would appreciate being able to budget only for energy use during a particular week or month. For example, in the summer when gas use may be low or zero, a prepayment meter customer on a zero standing charge tariff would not incur costs over periods of non-use.

3.22 There are however challenges with implementing options to introduce low or zero standing charges for both consumers and suppliers. For consumers, there are risks for those that have high energy demand that they cannot reduce, or would require them incur relatively large up-front costs to reduce. For example, those that have high demand because of medical equipment. Consumers with electric heating or properties with low energy efficiency would also be at risk. This could lead to these consumers paying more, exacerbating other vulnerability issues. For suppliers, it can create a risk that they may not be able to recover efficient fixed costs. For example, related to billing and customer service. If this leads to a higher cost of capital, this could increase total system costs for consumers.

3.23 Our further analytical work includes the upcoming 'Split Standing Charge Tariff Trial'. Running this trial in parallel with our work on low or zero standing charges, we can gain further insights into consumers' energy usage patterns and qualitative experiences of the split part tariff design. This will feed into our wider evidence base of how consumers perceive and use a tariff with a different standing charge structure and support our assessment of the distributional impacts of different options.

Block tariffs

3.24 A single rate structure includes one unit rate price, regardless of consumption. Both block tariffs (falling and rising block tariffs) use different levels of consumption with each 'block' capturing a set amount of energy consumption. We

have presented these as rising and falling blocks for simplicity. However, we recognise prices could also change in a graduated way.

3.25 A single rate structure has benefits as it is a very simple tariff for consumers to understand. This simplicity is likely to support consumers in comparing their expected energy bills and help consumers in making suitable decisions for their individual circumstances and energy needs. It would also be more straightforward for suppliers and other market participants, such as price comparison websites, to implement and explain to their consumers. However, for a single rate low or zero standing charge approach to work without leading to overall under recovery, it requires enough consumers to pay more to balance out those that would pay less. This could be a difficult balance to achieve with a single unit rate.

3.26 A falling block tariff (FBT) structure includes multiple blocks of defined consumption thresholds, where the unit rate for the first block of consumption (from zero kWh to the first threshold) is a higher unit rate than that of the remaining consumption blocks. A FBT structure aims to recover most of the fixed energy system costs through the first block, through a higher unit rate. Since all consumers pay this higher rate for their first block of usage, a falling block tariff ensures that everyone contributes to the fixed energy system costs. If consumption exceeds a threshold, the unit rate is reduced, which is designed to recover a much smaller proportion of the fixed costs. However, subject to the specific tariff design, falling block tariffs may be criticised for encouraging consumers to use more energy. As the standing charge could still be recovered over very low levels of consumption, this option may not give consumers a greater sense of control over their bills.

3.27 A rising block tariff (RBT) includes multiple blocks of defined consumption thresholds, where the unit rate for the first block of consumption is a lower unit rate than that of the remaining consumption blocks. Where a FBT aims to recover fixed costs up front, a RBT can provide consumers with an affordable allowance of essential energy use and help incentivise more efficient energy use through an increasing pricing structure. Given this pricing structure, we would also expect it to allocate more system costs to consumers with higher consumption, and the price increases through the blocks.

3.28 This structure can therefore benefit consumers with low energy use as the initial units of energy usage would be at a lower cost to consumers, which may incentivise energy reduction and energy efficiency. This can also provide financial and bill control benefits to consumers. On the other hand, we would expect

increased bills for consumers with higher consumption that exceed the first block. This may cause issues for consumers with necessary high usage, for example those with medical needs, and disincentivise take-up of EVs and heat pumps. This option could also increase the risk of supplier under recovery if many consumers do not exceed the first consumption block, as they seek to reduce consumption to avoid the higher priced block.

3.29 Both block tariff options also come with increased complexity. Consumers may find it more difficult to understand their bills or predict what their bills will be over a particular period. This complexity was one reason why Ofgem prevented suppliers from providing rising block tariffs in 2013, as multi-tier tariffs were not part of the four core tariff offering at the time. As a result, some may also find it more difficult to compare tariffs to determine the best choice for their circumstances. However, given changes to the GB energy sector since then, and expected changes in the future, we think it's appropriate to consider a range of options at this point.

3.30 There may also be implementation issues related to whether supplier billing systems could incorporate block tariffs as well as issues with traditional meters and accuracy of billing, and whether alternatives are mandated or made subject to consumer choice. It will also be important to assess whether options that would require energy suppliers to offer a range of new tariffs would impact our objectives differently. For example, in relation to fairness, and whether they would require changes to how Ofgem regulates network charging to suppliers, or if an alternative mechanism (and possibly agent) may be required to reallocate costs. Depending on the degree to which these costs are reallocated at source, changes of this kind could also alter risk profiles for suppliers and others. We are keen to hear respondents' views on this and how best Ofgem might consider impacts.

Time of use

3.31 It is also possible to place a greater emphasis on when users are using the system. This has a huge potential to create consumer-led flexibility that can increase system efficiency and potentially reduce total system cost. This can help the system manage short-term variations, such as demand-side response to changes in renewable output. It can also help longer-term, through changes in behaviour that requires a smaller energy system to serve peak demand. There are also a range options for how consumers can be engaged in this market. From simpler approaches such as peak and off-peak pricing, to dynamic pricing where a

consumer's prices can change within the day. Some consumers will welcome the additional level of control over their costs that these models can give them. Where capacity information isn't available, or is not intuitive to users, time-of-use volumes may perform a similar role with simpler data. There are disadvantages to such an approach, such as shifting cost recovery to users who are unable to change their consumption at certain times and worsening issues around which consumer groups pay for energy system costs. This may have impacts on certain segments or vulnerable users and might lead to unforeseen consequences.

Location of use

3.32 Costs in GB's energy system naturally vary based on location as it costs different amounts of money to do the same activity in different places. Many factors can drive these costs, including the cost of land or labour, whether visual impacts of energy infrastructure need to be mitigated by putting them underground, or simply historical differences in the way the system was designed or built in a specific location. Under current rules in GB, regional differences in costs are mainly in the electricity system, and largely driven by regional variation in distribution charges. This is a result of different physical characteristics in regions, as well as differences in demand and population density that vary across GB. See Annex 1 for more details.

3.33 These differences in regional costs are then passed onto consumers, and is largely reflected in different standing charges for each region. This can be seen in our regional breakdown of standing charges in the price cap, for example. This approach is based on the principle that the specific users of the system face the costs of using it. This means consumers who live in a lower cost region face the benefits of that through lower charges, and vice versa. It is not unique to the energy sector. For example, water consumers pay different prices for their water and wastewater services based on which region they live.

3.34 However, there are options around how cost differences based on location can be managed and then passed onto consumers. For example, regional differences can be targeted and reduced by direct policy intervention. In energy, the Assistance for Areas of High Electricity Distribution Costs (AAHEDC) policy currently makes a contribution towards the network costs of the North Scotland region to bring their high distribution costs down. Further, these regional costs could theoretically be shared to reduce or level charges for GB consumers across GB. This could remove regional differences in consumers. Again, there are examples in other sectors where the regional differences in costs are not passed on to them, and they

receive a single, flat fee. For example, in the postal sector, the cost of the same class of stamp is the same within the UK, regardless of how far the item then travels.

3.35 When considering any potential approaches, it's important to consider the impact and whether it would interact with other market signals for consumers. For example, would it impact incentives to participate in flexible market arrangements or for them to react to longer-term strategic system plans.

Ability to pay-focused options

3.36 In theory there are two broad policy approaches to address ability to pay and energy affordability. Interventions can focus on who is allocated the system cost, in a form of 'pre-distribution'. They could also reimburse consumers with a lower ability to pay after the costs have been allocated to them, in a form 're-distribution'.

3.37 Models that seek to account for other outcomes, such as lower charges for domestic consumers who may be struggling to pay, will require reliable information on consumers and may therefore be more complex and costly to implement, or may be poorly targeted. We would also expect that the information collection on which users would need these options, which might be sensitive, and the administration of the charges, would need careful design.

3.38 The Department for Energy Security and Net Zero (DESNZ) published a Review of the Fuel Poverty Strategy in February this year. This included consideration of options for bill support for low-income households, setting out some parameters for design options. Within this there were considerations for identifying eligible households and how bill support could be funded.

3.39 More widely, bill support mechanisms are used in other sectors in the UK to reduce bills for consumers. In the energy sector, there are already schemes that provide direct support for vulnerable people, including the Warm Home Discount (WHD) scheme, which provides a one-off £150 discount off eligible consumers' electricity bills. There are also examples of a similar approach in other regulated sectors, including the water sector. In England and Wales, Ofwat requires every water company to offer bill support to reduce bills for consumers on low incomes, although companies have flexibility in their design. Therefore, eligibility and help available for each tariff varies between regions. Most bill support mechanisms are funded by cross-subsidisation through a charge on customer bills, and some companies make additional financial contributions to their consumers. DEFRA

have been considering an update to the bill support mechanism through the Water (Special Measures) Act. This allows costs associated with making special provision in charges schemes to be shared across companies, and could also enable government to design new affordability schemes with more equitable outcomes.

3.40 With these approaches, there are inherent challenges with the data and information that enables the policy. In particular, there can be challenges in collecting household income data, and consolidated data isn't currently available in GB and may not be for some time.

4. Assessment framework

This chapter sets out the five criteria we propose to consider in refining and appraising options to allocate and recover energy system costs from consumers. It includes potential areas of analysis and data sources for these criteria. We also consider how criteria may interact and potential trade-offs as well as the timeframe for our assessment.

Proposed assessment criteria

4.1 Any consideration of how energy system cost allocation and recovery could be changed to create a fairer and more efficient system will involve assessing several trade-offs.

4.2 As an illustration, allocating energy system costs to peak times would be efficient, if it drives less use at these times, reducing the need for expensive network and peak generation build, and lowering bills for all. However, peak charging would be a big change to today, that would not be straightforward to implement and so there is a risk that the charges are ineffective in changing customer behaviour. It could also be considered less fair if some consumers are not physically able to respond to those price signals and end up with higher bills as a result. We need an analytical framework that can assess these trade-offs. Our initial thinking is set out below and we seek views and input from stakeholders on how we should refine our assessment framework.

4.3 In designing our analytical framework, our starting point is our statutory duties as an independent regulator operating within a statutory framework set by Parliament. A summary of some, but not all, of the key elements of our statutory framework includes the following. Our principal objective is to protect the interests of existing and future gas and electricity consumers, by promoting effective competition where appropriate. In protecting consumers, we must have regard to a range of factors, including licence holders' ability to finance their activities and recover efficiently incurred costs, the needs of vulnerable consumers, and the interests of consumers in the UK meeting its 5-yearly carbon budgets and its net zero target for 2050. Ofgem must also have regard to the desirability of promoting economic growth. DESNZ are currently undertaking a review of Ofgem, which covers Ofgem's mandate, scope and remit. Our duties, and how we interpret them, will be subject to the conclusions of that review.

4.4 More broadly, Ofgem has a duty to have regard to DESNZ's Strategy and Policy Statement (SPS) for energy and the priorities this contains. We will also consider the government's wider priorities and how these evolve, including its approach to energy affordability, economic growth and its wider targets for the sector such as the Clear Power 2030 Action Plan.

4.5 Given this context, we envisage five key pillars to our assessment framework for this cost allocation and recovery review as set out below. Not all are expected to carry equal weight, for example growth may be much more relevant when considering options for non-domestic consumers than domestic, and we must balance our duties as we best see fit in each circumstance. However, all are likely to require some consideration.

Table 1: Key factors relevant to our proposed assessment framework

Criteria	Description
Efficiency	Reduced total energy system costs, which will feed through to lower bills for current and future consumers; reduced 'user value' of energy due to reductions in usage.
Fairness	To protect the interests of current and future energy consumers and to reflect the needs of specified consumer groups.
Practicality	Practical to implement and readily understood: Reflects ease and speed of implementation; the degree to which we expect the intended effects to materialise in practice; and consumers', retailers', and networks' likely levels of understanding of revised charges.
Net zero	Facilitates the decarbonisation of the GB economy in a way that supports the achievement of specific greenhouse gas emission targets and budgets.
Economic growth	Extent to which the option is expected to promote economic growth in GB.

Question 6: What do you think of the five criteria we have proposed to assess and the descriptions we have provided for their scope? How should we balance the trade-offs between these?

Using the assessment framework to analyse options

Areas of analysis and data sources

4.6 Below, we provide our initial views on the areas of analysis we could undertake to help assess options against the five criteria, and the data sources we expect could be drawn on in our assessment. Due to uncertainties, much of the analysis is likely to be scenario-based. This means we will need to assess the potential costs and benefits of options in different scenarios for how the energy system, and extent of consumer engagement in the energy transition, could look over time. The energy system is evolving rapidly, and scenarios will be important to avoid bias in thinking towards the status quo. Drawing on a range of plausible assumptions these scenarios will allow us to assess how consumers are expected to react to changes in the way charges are structured. Where possible, we will adapt or augment scenarios already available on the expected evolution of the energy system and draw on consumer research and views from respondents to this CfI. Scenarios will reflect government policy.

4.7 **Efficiency:** Any reallocation of costs between fixed (standing), unit, and other charges could affect consumers' levels of energy usage, by altering the costs they face for each additional unit consumed. We will seek to assess this change and how it might alter energy system costs (for example, through reduced operational and capital requirements) and the value consumers derive from energy use. We propose to create a simplified model of system costs, illustrating for stakeholders the changes likely to result from our policy options. To estimate possible changes in levels of energy usage, we anticipate drawing on estimates of energy demand sensitivity to prices from literature and consumer research. We welcome data and insight from stakeholders on this, and on any costs to industry of administrating new or additional tariffs.

4.8 If possible, we will also consider whether options could deliver efficiency benefits by influencing domestic consumer groups with the greatest potential to offset total and peak demand (for example, EV users as EVs provide storage capacity and can be charged at off-peak times). We will seek to ensure that we align to the Clean Flexibility Roadmap that is part of DESNZ's work on the implementation of Clean Power 2030.

4.9 **Cost-reflective pricing and efficiency**: We expect a key step in the efficiency analysis will be to assess how charges would look if they were fully 'cost reflective'. 'Cost reflective' in this context means that any costs that vary with consumers' level of energy usage are recovered through unit (or other variable) charges – so that users 'feel' the impact of any changes in their level or patterns of use on underlying energy system costs; and, conversely, where costs that do not vary with usage are recovered through standing charges – so fixed for consumers too.

4.10 Other things equal, this kind of pricing is likely to have efficiency benefits. This is because, when consumers face the underlying cost of their energy usage decisions directly, it is likely they will adapt their levels and pattens of energy usage to best balance the additional benefits they receive from that use and additional costs of it to the system.

4.11 Suppliers purchase wholesale energy, pay network and policy costs, and incur retail costs including reading meters and collecting payments from consumers. For domestic consumers, we anticipate mapping how these various energy system costs are allocated under the current system and how they would be allocated under a fully cost-reflective charging system. For the latter, each cost component is classified as either fixed, variable, peak or per-customer based, and variable and peak-load related charges are then allocated to unit rates while fixed and per-customer costs are allocated to standing charges.

4.12 We envisage this would suggest a different efficient breakdown of charges to today's structure of standing charges and unit rates. In respect of network charges, the size of investment in electricity transmission needed to meet the needs of a Clean Power system is likely to be closely linked to the level of peak demand, whereas under the current charging structure the amount users pay for transmission are typically not driven by volume. This might suggest lower standing charges. On the other hand, we have seen evidence that more retail costs may be incurred regardless of a consumer's demand, than is assumed by the current charging approach. Taken together, our initial analysis suggests that longer-term system efficiency could potentially be improved if electricity standing charges were lower, and offset by higher unit rates or the introduction of a charge linked to peak volume. For gas, there would be an efficiency case for higher standing charges and a decline in unit rates, as the costs are driven largely by existing assets, which do not vary so much with consumer usage.

4.13 Whilst these are initial results, and the methodology is still being developed, we would welcome respondents' views on these initial findings on efficiency. We plan to update the methodology to take account of likely changes in the energy system in future decades and are aware this may change the results. We will also need to assess options against the other assessment criteria, so it should not be assumed that the option outlined above would necessarily be included in the subsequent shortlist of policy options, even if we were to confirm our initial findings on long-term efficiency.

4.14 Ultimately, this analysis is intended to help us estimate the effects of changes in charges on the costs of the future energy system. This analysis will need to be combined with estimates of how energy demand and costs might change as charges do, to understand impacts on efficiency. Wider aspects of efficiency, such as contribution of tariffs to meeting net zero objectives, will be examined separately.

4.15 **Fairness:** Reallocating energy system costs could affect groups of current and future consumers differently depending, for example, on their level of energy usage. For domestic consumers, this is linked to factors such as income, housing, and underlying health needs requiring specialist equipment. Impacts might also depend on consumers' wider energy-use characteristics, for example, whether they have a heat pump or EV. More generally, there could be differences in impact between domestic and non-domestic consumers, and between different non-domestic groups. Important factors include their levels of energy usage related to business type or sector, location, connection type, decarbonisation pathway, and ability to shift demand. For example, high voltage, high-capacity sites such as data centres could be particularly affected by changes to cost allocation and recovery. Data is likely to be a constraint for Ofgem's analysis in these areas but, where it allows, we anticipate analysing bills impacts by group as well as in aggregate. We will also have regard to existing and emerging government policies in our assessment.

4.16 **Practicality:** We anticipate assessing whether consumers might find some types of tariffs harder than others to understand, impacting their understanding of energy bills, engagement with new tariff structures (for example, time of use), budgeting, and ease of switching between suppliers. We will also consider broader system implementation, such as the ability of network companies and suppliers to implement. Our analysis will be narrative-based, whilst also drawing on consumer research and trial insights. We will also explore the change processes, how long it

would take to implement different options, and how costly or complex it might be, and for whom.

4.17 **Net zero duty:** If energy demand and so generation and investment levels change, greenhouse gas (GHG) emissions would also be expected to change. We anticipate valuing GHG impacts in monetary terms. For electricity, it may also be necessary to assess how options fit with the wider changes needed to deliver net zero, for example, whether any increase in unit charges could disincentivise uptake of EVs and heat pumps, slowing electrification of the transport and heating sectors. We will also consider impacts on demand flexibility. We will also explore whether such options could undermine incentives to electrify industrial processes in the non-domestic sector. We anticipate assessing options qualitatively on their level of consistency with key changes needed to meet net-zero as described in the key energy scenarios. We expect to classify the required changes thematically to help keep analysis manageable.

4.18 **Economic growth:** To assess impacts on economic growth, we plan to draw on the government's statutory guidance on the Growth Duty, which identifies key drivers of sustainable economic growth. The efficiency and productivity driver is likely to be relevant if any changes in energy costs for non-domestic consumers impact their investment or supply decisions, though it is not yet clear if quantitative evidence is available on the sensitivity of these activities to energy prices. Following responses to this CfI we will consider whether other drivers, such as innovation, are also relevant.

Table 2: Possible sources of evidence

Impact	Areas of analysis	Data sources
Efficiency	Least-cost energy supply and total system costs	Breakdown of system costs; scenarios for sensitivity of costs to changes in demand
Efficiency	Value derived from energy use; revenue and revenue uncertainty	Demand information and elasticities from literature, potentially informed by customer research
Efficiency	Relationship between prices and costs	Ofgem internal cost analysis
Efficiency	Costs to energy industry of administrating new / additional tariffs	Stakeholder submissions
Efficiency	Adoption of flexible and strategic technologies and usage behaviours	Scenarios for sensitivity of uptake and use of these to energy pricing, potentially informed by customer research
Fairness	Consumer energy bill impacts by groups of future energy consumers (domestic / non-domestic;	Public engagement on how consumers understand fairness; scenario analysis of bill impacts by subgroup; Living Cost and Food

	strategic groups such as heat pump and EV users; income groups; health and disability indicators; potentially non-domestic demand capacity and locations)	Survey and English Housing Survey data
Fairness	Aggregate distributional analysis of policy options consistent with Ofgem's distributional framework	Group-based results and Green Book distributional weights
Practical to implement and readily understood	Consumer understanding of bills, their likely energy costs in future, and the tariffs available to them	Structured narrative drawing on customer research; separately for domestic and non-domestic consumers and potentially for early and later adopters of strategic technologies
Practical to implement and readily understood	Speed, ease, and costs of implementation; who would have legal powers to enact necessary changes	Internal analysis and analysis drawing on stakeholder submissions
Net zero	Fit of options with NZ pathways	Structured narrative on extent to which options either help or hinder delivering the technology and behavioural changes needed to enable transition to NZ, as described in key energy transition scenarios, such as NESO's Future Energy Scenarios, flexibility plans, and Carbon Budget deliver plans)
Net zero	Energy sector emissions	Scenarios based on NESO and other system data (for example, supply and demand data) and HMG carbon values
Economic growth	Fit with other Growth Duty drivers where possible	High-level narrative drawing on insights from stakeholder submissions
Economic growth	Costs and output and investment levels in business and industry	Bill impacts and, if available from literature, elasticities for the sensitivity of industry and business activity to energy prices

Question 7: What evidence should inform our options assessment? You are encouraged to share information, analysis and evidence with Ofgem to inform our assessment.

Key trade-offs and reaching an overall assessment

4.19 We have already discussed some of the key features of different options in chapter 3; below we set out what we expect to be the principal trade-offs between our proposed assessment criteria:

- **Practicality and efficiency:** for example, between the simplicity of billing arrangements (aiding implementation; reducing administrative costs for

energy suppliers; and promoting understanding for consumers, aiding competition and so efficiency) and the quality of price signals these arrangements provide to the energy industry and consumers (driving other aspects of efficiency, including on system costs);

- **Practicality and fairness:** for example, between the simplicity of arrangements and the level of benefit these can deliver to vulnerable consumers or in enabling specific types of energy usage or technology (as more complex tariffs might be needed to ensure effective targeting of earmarked support);
- **Fairness, efficiency and net zero:** if, for example, any tariffs chosen to encourage electrification (and so efficient transition towards net zero) would particularly benefit consumers who can store energy (in an EV or a well-insulated home with a heat pump) but these consumers are also typically the financially better off. Some options could lead to some consumers avoiding making contributions to system costs, which would then need to be paid for by other consumers; and
- **Fairness and economic growth:** if, for example, the allocation of costs between domestic and non-domestic consumers means trading off fairness (in mitigating any increases or enabling any reductions in bills for vulnerable consumers) and growth (in mitigating any increases or enabling any reductions in bills for businesses and industry).

4.20 Conversely, it is possible that impacts could be reinforcing across criteria, for example between net zero and efficiency if technologies crucial to the transition to low carbon also offer cost efficiency and energy system-balancing benefits. We invite respondents to feedback on both the key trade-offs as well as on any positive interactions between the five assessment criteria.

4.21 To manage expected trade-offs, we propose to express impacts of individual options in monetary terms where it is possible to do so, as robustly as possible and based on plausible scenarios. Where this is not possible, or Ofgem feels it is not sufficient to compare impacts in purely monetary terms (this might apply for example in relation to some aspects of fairness), we will consider other approaches, such as Multi-Criteria Analysis (MCA). MCA would provide a structure for assessing options systematically, helping us manage complexity in examining multiple possible impacts. However, we anticipate making overall decisions 'off model' rather than using MCA weights to trade off impacts. This is because weights would be subjective and we feel it is more transparent to be explicit on

this by reaching conclusions holistically, balancing Ofgem's duties as we best see fit in the circumstances.

4.22 In assessing options, we propose to consider impacts out to 2035, as we expect that as the system develops, we will need to evaluate the outcomes of this review. and re-assess the cost allocation and recovery methods beyond that date. We seek feedback from respondents on this proposed timeframe for assessment.

Question 8: What are the main trade-offs between our proposed assessment criteria? What are the main positive interactions?

Question 9: Do you agree we should consider impacts up to 2035?

5. Consultation questions and next steps

Consultation questions

5.1 Throughout this CfI, we have asked questions which we consider to be relevant to the issue of how energy costs are allocated and recovered, and which we believe would help inform any future policy in this area. We welcome the views of stakeholders on any or all of these questions, or indeed any of the other issues that are raised by this review. We also welcome any examples or evidence from GB and other relevant markets that could help with this review, including international comparisons of other energy markets that have experienced similar challenges.

5.2 Interested parties are invited to respond to the following questions, if possible, explaining and providing information and evidence to support their responses:

Question 1: What other examples or evidence from relevant sectors or international energy markets should we consider as part of our review?

Question 2: What options for amending domestic cost allocation and recovery should we explore in more detail and why? What options should we rule out at this stage and why?

Question 3: How would changes to the underlying rules and approaches for allocating and recovering system-wide costs be expected to translate into the tariffs offered by suppliers?

Question 4: What options for amending non-domestic cost allocation and recovery should we explore in more detail and why? What options should we rule out at this stage and why?

Question 5: Should we consider alternative methods for splitting network costs between domestic and non-domestic consumers? If so, what methods should we consider and why would these alternative methods benefit consumers?

Question 6: What do you think of the five criteria we have proposed to assess and the descriptions we have provided for their scope? How should we balance the trade-offs between these?

Question 7: What evidence should inform our options assessment? You are encouraged to share information, analysis and evidence with Ofgem to inform our assessment.

Question 8: What are the main trade-offs between our proposed assessment criteria? What are the main positive interactions?

Question 9: Do you agree we should consider impacts up to 2035?

Next steps

5.3 The CfI will be open to responses 24 September 2025. During this consultation period we welcome direct engagement and discussion with interested parties. Following the consultation period, we will review all responses, which will inform any further policy development. We intend to publish a consultation on more specific policy options by the end of 2025. However, the timing of future steps will be influenced by the feedback we receive to this CfI.

Annex 1 - Current approach to recovering energy system costs from GB consumers

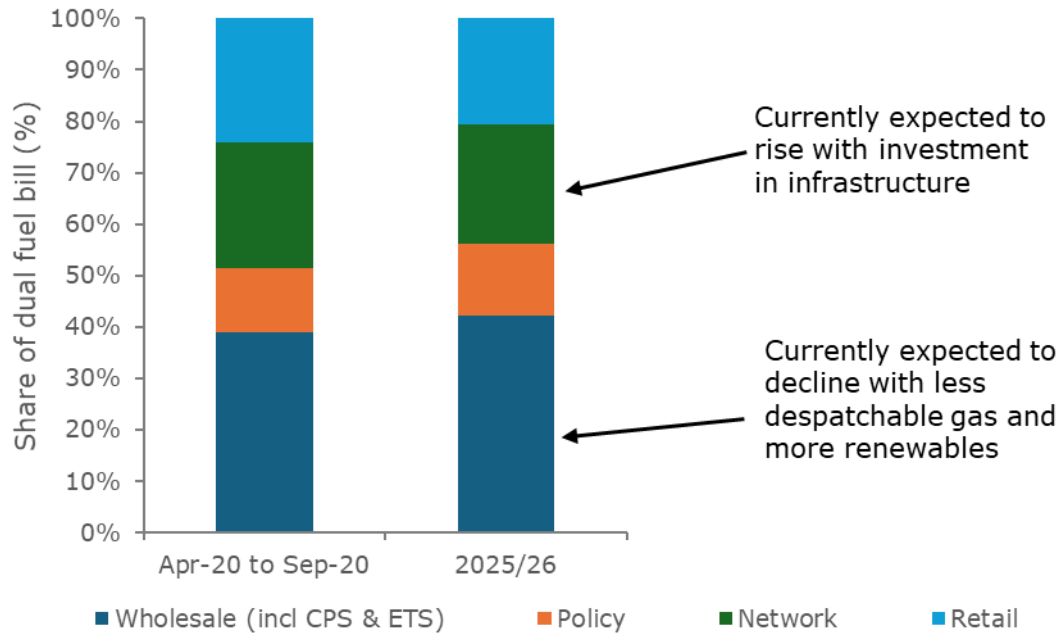
What are the costs categories?

1.1 In this Annex, we identify key components of energy system costs, and how they relate to consumers' bills. The rest of this Annex contains further details on what these costs are, how they are currently allocated and recovered from consumers, and how we expect these costs to evolve over time during the energy system transition. We define energy system costs as comprising the following four broad categories of cost:

- **Wholesale costs**: These are the direct energy costs consumers pay for the gas and electricity used in their homes and businesses. The wholesale price for gas and electricity can change quickly depending on the balance of supply and demand in GB, or wider economic and political trends around the world.
- **Network costs:** These are the costs consumers pay for the infrastructure that transport energy to their homes and ensures it is delivered within quality and safety standards. These can be broadly grouped into two categories:
    i. **Physical network infrastructure**: The costs of the gas pipes and electricity cables that carry energy across the country into consumers' homes or businesses.
    ii. **Balancing the systems**: In addition to the network costs related to the physical parts of the gas and electricity systems, there are separate costs related to using the network on a day-to-day basis. These charges cover the cost that System Operators (SOs) face when trying to balance supply and demand, ensuring continuous security of supply, or congestion charges.
- **Policy costs:** These costs cover schemes to support energy efficiency improvements in homes and businesses, help vulnerable people, encourage take-up of renewable technology and support security of supply.
- **Supplier operating costs and margin:** These costs represent supplier costs, including customer services, billing and the general costs of running an energy business and a margin, with default standard variable regulated under Ofgem's price cap.

1.2 Looking at the trends for these cost categories, the wholesale share of the average dual fuel domestic energy bill is expected to fall between now and 2035. Network costs are anticipated to make up an increasing share of the average dual fuel bill. Policy and retail costs share of the average dual fuel bill is expected to remain fairly constant over the period with small fluctuations. However, there is a range of uncertainty over all these projections, particularly the medium-term direction in the wholesale price, which also affects some policy costs, such as CfDs.

Figure A1: Change to bill composition for a typical dual fuel consumer period 2020 to 2025



Note: Carbon Price Support (CPS) and UK Emissions Trading Scheme (ETS)

How do they translate to consumer bills?

1.3 We can then see how these different costs broadly translate onto consumer bills, and what that means now and in the future. There are some exemptions to the description below. Using domestic energy bills as an indicative guide:

- **Standing charges**: Network costs for physical infrastructure and supplier operating costs are the main parts of the standing charges in a consumer's bill. These fixed standing charges are therefore covering the costs of the physical networks for electricity, such as building and maintaining them. So, this element of the bill reflects some of the regulatory decisions made by

Ofgem around how much network companies can spend. In addition, the full amount of these costs are recovered over a longer time period, such as over decades rather than a single up-front cost. Looking at supplier operating costs, it covers investments in the supplier's business such as call centres and IT systems. For tariffs covered by the price cap, Ofgem sets an efficient cost level for these activities.

- **Unit Rates:** Wholesale, policy, and network costs for balancing the system are generally recovered via the variable part of energy bills. For gas, network costs are also recovered through unit rates. This means there is a direct link between the energy consumers use in their homes, and the cost of wholesale energy, which have their prices influenced by international markets. Policy costs are also generally recovered through the unit rates, linking this cost with government policy. Finally, consumers' energy cost can also change with how much it's costing the SOs to balance the system. This means a more efficient system can directly reduce energy costs for consumers.

1.4 These descriptions of the standing charge and the unit rate illustrate that these do not directly reflect the level of fixed costs and variable costs in the system. "Fixed costs" is often taken to mean costs that do not change with volume in the short-term, in which case many of the costs recovered by the unit rate would potentially be better described as fixed costs. However, many of these costs are not fixed over the next 10 years; with the level of investment in the infrastructure needed for a clean power system dependent on the capacity that the system needs to meet, particularly at peak periods. This review will consider these relationships in more depth, and how the costs described in more detail below will be affected by the changes in volume that may result from different charging approaches.

Wholesale costs

What are these costs?

1.5 These are the direct energy costs consumers pay for when they use energy in their own homes and businesses. Suppliers typically buy the gas and electricity they need to supply their consumers on the wholesale markets, from other parties. Suppliers tend to buy the energy needed to supply their customers in advance of when they need to provide it (hedging), to help smooth out variations in wholesale costs, and protect consumers from short-term fluctuations. In 2025, they have typically been the largest components of domestic and non-domestic bills, across both electricity and gas. For domestic electricity, the wholesale costs

make up roughly a third of the domestic bill. This figure was higher for gas at around 50%.

1.6 There are separate markets in GB to buy wholesale gas and electricity, and prices are influenced by a range of factors. These include GB specific supply and demand conditions, to international geo-political and economic events, and can play out over the short- or long-term. For example, in wholesale electricity markets, we would expect prices to decrease on windy days as the amount of cheap renewable energy would increase. For gas, international supply concerns from the war in Ukraine have increased prices across Europe. For both fuels, we can also expect costs to rise with increases in demand, such as on a cold winter's day. As a result of this, wholesale prices can be different based on the season, month or day. For electricity, they also vary within day.

1.7 Finally, it's important to acknowledge the links between wholesale gas and electricity prices. In GB, gas-fired generation often sets the wholesale electricity price, meaning gas prices feed through to electricity prices. The government's Clean Power 2030 Action Plan envisages a smaller role for gas-fired generation, meaning gas could set the wholesale electricity price much less frequently.

1.8 Neither Ofgem nor government directly control or regulate wholesale energy costs. Government is responsible for setting the overall wholesale market policy direction, which currently includes carbon pricing that is electricity generator costs. For example, the type of markets that we have and how they are configured, which has been the subject of the government's Review of GB Electricity Market Arrangements (REMA). Ofgem is then responsible for overseeing the detailed market rules, such as our oversight of industry codes and wholesale market rules. Government policy does indirectly influence the wholesale markets, particularly over longer time periods. For example, government decisions over many decades to support renewables mean more wind generation has been installed.

How are these costs allocated and recovered?

1.9 These costs vary depending on how much energy a customer uses and are therefore recovered via the variable component of a consumer's bill. This applies to both domestic and non-domestic consumers, for electricity and gas. For some larger non-domestic users, there may be rules in their contracts about how much they can vary the number of units they buy.

How do we expect these costs to evolve over time during the energy transition?

1.10 By 2035/36, we expect wholesale costs to be a proportionally smaller component of energy bills. For domestic electricity, wholesale costs could fall as the roll out of renewable generation pushes down wholesale prices, although the lower wholesale price will be increasingly offset by higher CfD costs as more generation comes from renewable generators which have CfDs for support. Increased system flexibility and time of use tariffs may also support lower wholesale prices as expensive peaking plants are no longer needed. For domestic gas bills, some market commentators have predicted that the wholesale component could also fall. However, there is a lot of uncertainty in future gas prices due to the role international markets play in setting the price, and prices could stay flat or even rise.

Network costs – Physical infrastructure

What are these costs?

1.11 These costs are to pay for the gas pipes and electricity cables that carry energy across the country into consumers' homes or businesses. Network companies charge suppliers an Ofgem-regulated price for their use of the energy network, which covers the costs of maintaining, running and upgrading the networks. For domestic consumers in 2025, these costs have accounted for around 20% of the bill for electricity, and around 20% for gas. In GB, there are two core types of networks for gas and electricity:

- **Transmission**: These are the high voltage or pressure networks that are used to transport energy around the country. For example, moving electricity from a power station, or gas from an import terminal.
- **Distribution**: The distribution networks are the lower voltage and pressure networks that then take this energy directly to consumer's homes and businesses. This can be from the transmission networks, or from forms of supplies at a local level.

How are these costs allocated and recovered?

1.12 These network costs represent long-term energy system costs and are recovered from consumers over multiple years due to the total size of the cost and the inter-generational benefits they bring. Network investment in physical infrastructure is

largely a fixed cost as the networks still need to be paid for, whether or not a consumer uses energy on a given day. That said, the networks are built to serve peak demand, so if consumers shift their consumption to off-peak times, this can reduce the size and therefore total energy system costs needed to meet peak demand over time. This is mainly a consideration for electricity networks.

1.13 Network 'use of system' charges provide signals to generators to locate closer to demand centres and encourage users to reduce their consumption during high-demand periods. Both help to reduce the overall cost of the system. Any network costs that aren't recovered from generation or demand 'signals' are essentially recovered from consumers as a 'top-up' charge, via the standing charge for domestic and non-domestic consumers.

1.14 Top up charges for electricity, both at transmission and distribution level, are also split between domestic and non-domestic sectors using the volume share of each segment. Once they are allocated to either domestic or non-domestic consumers, they are further allocated to different groups (bands) according to their consumption. The domestic share is broadly split equally across all households as there is one band. This means that large and small households pay the same regardless of consumption or ability to pay.

1.15 For non-domestic users, their charges are made up of a set of banded fixed charges that increase with their electricity consumption for users without an agreed capacity, or with their capacity for users with an agreed capacity. The amount of money allocated to a band relates to the volume consumption of the users in it, consistent with how costs are allocated between domestic and non-domestic consumers. Users are allocated to bands on the basis of percentile groupings, with different approaches reflecting the availability of data for different users. A key feature of banded charges is that all users within a band face the same charge. This moved away from a transmission charging model that was based on system critical peak-time use, again following concerns about how avoidable the model had become.

1.16 For gas transmission, revenue to maintain and invest in the network is collected from capacity bookings, equally split between system entry and exit capacity. Entry capacity is booked by gas shippers, and is understood to be a pass through into wholesale gas prices. Gas distribution networks book most exit capacity and directly pass this cost through to suppliers; suppliers pass this on to consumer

bills. Some large industrial consumers are directly connected to the transmission network, such as gas generation, so pay exit capacity. System operation revenue is collected predominantly through a general charge levied at exit and entry points on gas flows, but in small part through specific charges on certain users.

1.17 At the distribution level, revenue for network costs and operation is collected through several charges levied on consumers' meter points. These have capacity and commodity elements, and different charge bands for different users based on the annual demand of users. Charges are set in part to reflect the amount of the network consumers use.

1.18 In addition, all networks use some form of connection charging system to ensure that the users joining the network pay a contribution toward the costs of their connection up front.

Regional variation

1.19 Regional variation in electricity bills is largely driven by regional variation in distribution charges. This is a result of different physical characteristics in regions, as well as differences in demand and population density that vary across GB. Each region has a different price control due to these differences in costs. The top up charge for each region also varies as they are driven by money recovered from cost reflective charges and the money needed by allowed revenues. For example, high demand and high population on a small network can reduce the amount of top up charges that are needed. The result is that there can be significant variation in regional system costs. There are small differences in transmission costs across the network, but most other costs are set nationally, meaning there is little variation between areas.

How do we expect these costs to evolve over time during the energy transition?

1.20 Following the government's decision on REMA, to reform a national (GB-wide) wholesale electricity market, we published an open letter to set out our initial thoughts on how network charging signals could be reformed to provide greater predictability and align with strategic plans. The amount of network costs that will need to be recovered from top up charges in future will not only depend on the scale of network costs, which are expected to increase over time. They will also be

driven by the amount of network costs that are recovered from generation, demand and storage as forward looking charging signals, which is not yet known. It is therefore entirely possible that more network costs will need to be recovered from consumers via top up charges in the future than is the case today.

1.21 We expect the proportion of the energy bill that pays for network costs to change over the next decade. For electricity, network costs will increase. This relative growth is driven by an increase in electricity network investment, as the whole electricity network grows to accommodate more clean generation and increased demand. For gas, network costs may also increase by 2035/36, but to a smaller extent. This expected change is mainly driven by the costs per gas user associated with the assets in the gas system increasing, as the GB energy system decarbonises.

Network costs – Balancing the system

What are these costs?

1.22 Network costs also include 'balancing' and 'congestion' charges, but these have different characteristics to physical infrastructure investment and costs. They represent the day the day costs of operating GB's electricity and gas systems. They can vary with the time of the day, and are often higher at peak times. In these systems, supply and demand need to be balanced either second-by-second for electricity, and daily for gas. To ensure both systems stay safe, and consumers get the energy they need, the system operators for the two systems have to take live actions to ensure smooth and continuous supplies. For example, this would cover the cost of short-term backup generation if electricity supplies fell at short notice. They are not regulated by Ofgem in the same way as the costs that pay for physical infrastructure, but the system operators need to make sure they are incurred efficiently.

1.23 The costs of these have short- and long-term drivers, with the number of actions needed and the cost of each one consistently driving the overall cost, and the proportion of these costs on bills. In the short-term, these costs can be driven by things such as the wholesale price and short-lived system problems, like unexpected infrastructure outages. In the long-term, the amount of available space on the network can also drive costs. Overall, they are mainly volume driven by the number of actions that need to be taken, but with significant fixed capacity

and financial cost components. In 2025, these costs represented less than 5% of the total domestic electricity bill. Due to the setup of the gas system, these costs are included within the physical infrastructure costs of the gas network.

How are these costs allocated and recovered?

1.24 Balancing costs are incurred by the system operators (SOs), NESO and National Gas. They cover the internal SO costs of planning and managing the system and also collect the revenue to pay for key activities like managing system bottlenecks and imbalance. This ensures there is enough generation capacity in reserve, and making sure energy is delivered smoothly within quality standards. Constraints management is the action of dealing with delivering energy from one place on the system to another when there is not the physical ability to do it. When the SOs buy energy and take actions to manage all of this, they create system costs that need to be recovered from consumers. These costs are treated as variable costs for the purpose of the Ofgem price cap.

How do we expect these costs to evolve over time during the energy transition?

1.25 In the longer-term, we expect these costs to be driven by wholesale costs and the overall efficiency of the system. We expect the transition to net zero, and the investment in renewable generation and new infrastructure to drive down wholesale prices and increase network efficiency. As result, in 10 years' time these costs could make up a lower proportion of domestic electricity consumer bills than they do now. For domestic gas bills, balancing costs are a smaller proportion of the total bill, and we expect this to continue.

Policy costs

What are these costs?

1.26 These costs cover schemes to support energy efficiency improvements in homes and businesses, help vulnerable people, encourage take-up of renewable technology and support security of supply. Examples of these include the Warm Home Discount (WHD) scheme, which provides a one-off £150 discount off eligible consumers' electricity bills. Energy Company Obligation (ECO), an energy efficiency scheme designed to tackle fuel poverty and help reduce carbon emissions, through home improvements like insultation. Or the Renewable

Obligations (RO) scheme, which encouraged renewable generation development. The government are responsible for the overarching policies and costs associated with them. These costs are predominantly levied onto electricity consumers, with some exceptions including the Green Gas Levy. In 2025, policy costs accounted for around 20% of a typical domestic electricity bill, but lower than 10% for gas.

How are these costs allocated and recovered?

1.27 For domestic consumers, these costs are predominantly levied onto the unit rates of electricity consumers. However, there are exceptions to this, and the Green Gas policy costs are added to gas standing charges. We have included Capacity Market (CM) and Contracts for Difference (CfD) in this list, but note for the purposes of our price cap, they are classified as wholesale policy costs. This allows them to be updated alongside broader movements in wholesale costs. Below we have included a summary of the key policy costs:

- Two schemes relating to supporting low-income users are paid for using policy costs. These are the Energy Company Obligation (ECO) and Warm Home Discount (WHD) schemes. ECO supports energy efficiency upgrades for lower income households, while WHD provides annual discounts to low-income users. These are complex schemes, but the recovery of the costs of these schemes is a per-unit addition for ECO costs and a standing charge addition for WHD. This is on both gas and electricity consumers.
- The CM exists to ensure that generating capacity is available to meet the needs of the system. It provides support payments to generators needed that supports them to keep a power plant online, or develop a new power plant. These costs are recovered through volumetric peak pricing, which typically translates as a variable charge for consumers.
- There are a number of policy costs associated with renewable energy. These are Renewable Obligation (RO), Feed-in-Tariffs (FiT) and CfDs. In each case, renewable generation investment is supported by payments to generators. These payments are paid for by end users. Being costs related to generation, the costs incurred by the developers of these schemes relate to generation investment, and the subsidies made to them are in the form of "volumetric" per-unit subsidies. Scheme funding comes from suppliers as per-unit charges who then pass the costs on to consumers. We note that RO and FiT are expiring schemes, with no new contracts being awarded. Costs associated with them are running costs associated with previous schemes.

- The Assistance for Areas of High Electricity Distribution Costs (AAHEDC) is another policy cost. This currently makes a contribution towards the network costs of the North Scotland region to bring their high distribution costs down. This lump sum contribution is recovered from unit rates from users.
- The Network Charging Compensation (NCC) scheme came as part of the British Supercharger Scheme, and it currently provides 60% compensation on eligible network charging costs for Energy Intensive Industries (EIIs). Government is currently consulting on increasing this to 90%. The NCC Scheme is funded through a levy on electricity suppliers known as the EII Supplier Levy, and we expect is recovered through volumetric charges.
- Finally, there is the Green Gas Levy (GGL) that funds the Green Gas Support Scheme which supports the production of green gas to inject into the gas grid. Payments are provided to plants based on the units of gas provided, and the cost of the scheme is paid for through a per-meter charge on gas users.

How do we expect these costs to evolve over time during the energy transition?

1.28 As these are government costs, our expectations on their future levels are in line with current government policy and announcement, as well as their relative size to other components that are changing (for example, the overall wholesale energy cost). Overall, the level of policy costs could therefore either increase or decline, depending on both future policy decisions and wholesale prices, although those policy costs that are directly linked to the level of infrastructure investment are likely to increase.

Supplier operating costs and margin

What are these costs?

1.29 When suppliers set their prices, they will try to cover their operating costs as well as make a profit. Operation costs cover things like customer service, billing, and the general costs of running an energy business such as managing consumer debt. Suppliers need to recover these costs to ensure they can provide a quality service to consumers, such as accurate billing and responding to customer service enquiries.

1.30 Margins are a supplier's overall earnings before deducting interest, tax and other costs. These are regulated for domestic tariffs covered by Ofgem's price cap, ensuring efficient levels can be recovered. Efficient margins are important for ensuring suppliers have money to re-invest in their business, and ensure it continues to adapt with technological changes and the needs of their customers. However, Ofgem does not regulate tariffs outside of this price cap, or non-domestic tariffs.

1.31 For both domestic electricity and gas, the profit margin bill share was broadly 3% in 2025. Once we include operating and other retail-specific costs, the total share of the bills that relate to retail costs is around 20%.

How are these costs allocated and recovered?

1.32 We expect suppliers use individual discretion on how these costs are recovered, so it may vary between suppliers. For supplier operating costs, suppliers may recover them through a mixture of fixed and variable charges on consumers depending the characteristics of the costs. The margin can then be considered as the overall difference between the payments suppliers receive from consumers, and their overall costs.

How do we expect these costs to evolve over time during the energy transition?

1.33 Looking out to 2035, our starting point would be that we would expect operational activities to be consistent over time, and therefore for costs to stay at broadly similar levels to today in real terms. However, this may change, for example due to technological developments, such as artificial intelligence (AI) use in customer service functions, or due to changes in market conditions.

Annex 2 – Domestic consumer insights

Omnibus survey

2.1 As part of a wider programme of research related to the future of energy pricing, Ofgem commissioned Ipsos UK to deliver a survey of 3,571 domestic energy consumers across Great Britain. Ipsos UK interviewed a representative quota sample of 4,201 adults aged 18-75 in GB using its online omnibus. Fieldwork was carried out between 10 and 14 January 2025. Quotas were set on age within gender, region and working status. The data have been weighted to the known offline population proportions for interlocking cells of gender within age, working status, as well as region, education and social grade to reflect the GB adult population. Ipsos was responsible for the data collection and Ofgem responsible for the survey design, reporting and interpretation of results. Of the 4,201 adults, 3,571 were domestic energy consumers who are solely or jointly responsible for their household's energy bills. Ofgem's questions were only asked of those 3,571 domestic energy consumers.

2.2 The purpose of this survey was to understand domestic energy consumers' top-of-mind views towards energy pricing structures. The survey included 3 versions of text explaining what standing charges are, participants were randomly assigned one version for their survey. Results were broadly similar across the different version of texts. The text versions shown were:

1) **Version 1**: "Standing charges are a fixed daily amount on a household energy bill";
2) **Version 2**: "Standing charges are a fixed daily amount on a household energy bill. They are used to pay towards maintaining and upgrading the energy supply network, and for customer-facing services, such as call centres and providing bills"; and
3) **Version 3**: "Standing charges are a fixed daily amount on a household energy bill and is included even if they don't use any energy that day. Standing charges are used to pay towards maintaining and upgrading the energy supply network, and for customer-facing services, such as call centres and providing bills".

Domestic consumer deliberative research

2.3 Deliberative research takes many forms but is designed to generate in-depth insight to inform decision-making. In deliberative approaches, participants are

taken on a journey, learning about a topic in detail that they likely know little about. By engaging with information and expert opinion, participants can engage with complex topics more deeply than using other methods. Deliberative approaches seek to understand the public's values and explore how they make difficult trade-offs, after weighing up different evidence and information.

2.4 54 members of the GB energy consumer base participated in the study. The sample included consumers from across Great Britain (England, Wales and Scotland) took part in the research, ensuring diversity in terms of key demographics, energy payment methods, tariff types, suppliers, and vulnerability status. Participants undertook an individual online exercise to understand their baseline understanding of key energy issues followed by a one-day group session in their respective location where topics were covered in greater detail using various exercises and prompts.

Cost Allocation Online Experiment

2.5 An online behavioural experiment was developed in-house using the Gorilla Experiment Builder, a platform for designing and hosting surveys. Dynata, a market research agency was commissioned to recruit a representative sample of around 3,850 domestic energy bill payers across GB. Quotas for age, gender, and region were set to reflect the GB adult population. While the sample was representative at the trial's outset, branching pathways introduced later may have affected this, meaning certain results may not be fully representative of the GB population.

2.6 The fieldwork was conducted in March 2025. Notably, a February 2025 price cap announcement may have influenced participants' attitudes or behaviours during the experiment.

2.7 Alongside asking participants to give fairness rankings for standing charges and unit rates, a key component of the experiment was a dynamic cost allocation task. Participants used a slider to set their preferred level of standing charges for electricity. This interactive tool illustrated the trade-offs involved, as adjustments to the standing charge triggered real-time updates to the unit rate, helping participants understand the cost implications of their choices. This task required participants to make an active selection and a "don't know" option was not provided.

2.8 The experimental method allowed for A/B testing on what information was provided to participants, and how that might impact fairness and allocation

scores. Some participants were shown enhanced information on the reasons behind standing charges, or the impact a reduction in standing charges would have on their personal energy bills.