Aldersgate Group response to Energy Security and Net Zero Committee's inquiry on the cost of energy

April 2025

Background

The Aldersgate Group is an alliance of major businesses, academic institutions and civil society organisations which drives action for a competitive and environmentally sustainable UK economy.[1] Our corporate members represent all major sectors of the economy and include Associated British Ports, Aviva Investors, BT, CEMEX, the John Lewis Partnership, Michelin, Nestlé, Siemens, SUEZ, Tesco, and Willmott Dixon. Aldersgate Group members believe that ambitious environmental policies make clear economic sense for the UK, and we work closely with members when developing our independent policy positions.

Response

Question 1: Are the costs and benefits of the energy system properly reflected in consumer bills?

The government must review how costs and benefits of the energy system are reflected in consumer bills. It is crucial to consider how the energy system can be made low-carbon and secure, whilst increasing affordability – delivering greater benefits to consumers and balancing costs.

The UK has some of the highest energy bills in Europe for both domestic and non-domestic consumers. The principal reason for high energy bills is the UK energy system's reliance on international gas. Gas sets the wholesale price of electricity 98% of the time. In contrast, the EU average for gas as the price-setting factor is less than 40% and, in the case of France and Germany, gas sets the wholesale price only 7% and 24% of the time, respectively.[2] Over six million UK households are in fuel poverty, and energy debt for domestic consumers is at an all-time high, reaching around £4 billion in 2024.[3] The UK also has some of the highest industrial electricity costs in the G7; they are 46% above the average for International Energy Agency (IEA) member states.[4] From an industry perspective, energy costs are a key issue for international competitiveness and barrier to investment in the UK. This is particularly acute for energy-intensive sectors and sectors for which energy costs represented a significant proportion of operational costs.

The transition to a clean energy system will provide significant benefits for both the climate and consumers, by reducing reliance on international gas with lower cost and lower carbon energy technologies. Delivering the government's Clean Power 2030 Mission requires significant investment in the renewable energy and grid infrastructure, whilst maintaining the capacity market. Part of this investment is funded through policy and

[1] Individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.
[2] Carbon Brief (2025), Factcheck: why Conservative leader Kemi Badenoch is wrong about UK's net-zero goal.
[3] Ofgem (2024), Total financial value of domestic customer debt and arrears (existing for more than 91 days)
[4] DESNZ (2024), Industrial electricity prices in the IEA (QEP 5.3.1)

network costs included in consumer energy bills. The Climate Change Committee has shown that investment will be required upfront to meet net zero through their Balanced Pathway, but that this investment will result in net savings over time thanks to falling technology costs and increased operating savings.[5] **The government must consider how the upfront investment in the energy transition is distributed across consumers, taxpayers and the private sector**. It is crucial to ensure the benefits of this investment can be effectively communicated and made visible in consumers bills, and appropriate support provided in the near term for the most vulnerable energy consumers.

How costs and benefits of the energy are distributed in consumer bills is complex, with market, policy and system costs included. Currently, the government funds key energy infrastructure through levies on electricity bills rather than through general taxation. Over time these levies have come to make up a sizable component of consumer electricity bills.[6] A complex system of exemptions is in place for the most vulnerable non-domestic consumers, such as energy intensive industrial users, as well as discounts through decarbonisation polices. The cost of discounts and exemptions is passed onto other energy consumers, increasing their bills further.

High energy costs also present a challenge to delivering the benefits of the energy transition to households, businesses and the wider energy system. Electrification has a crucial role to play in decarbonising industry, heating and transport. In addition to reducing carbon emissions, decarbonisation can benefit households and businesses by reducing their reliance on gas, and its price volatility, as well as through the efficiency and productivity benefits of electrified processes. However, high electricity prices discourage consumers from switching to electric solutions such as heat pumps, electric vehicles and electrified industrial processes.

The government should also consider the wider benefits of the clean energy transition and how these may best be reflected in consumer bills or supported through other public funding such as taxation. Between 2023 and 2024, the net zero sector grew 10.1% and now generates £83.1 billion in Gross Value Added (GVA), with £28.8 billion directly from net zero businesses and £54.3 billion from supply chain activities and broader economic contributions. This robust performance underscores the sector's multiplier effect, with every £1 of value generated by the net zero economy creating an additional £1.89 in the wider economy.[7]

Question 2: How should consumer bills be insulated from inflated prices due to shocks to the global supply of gas? What needs to change?

Consumer bills are currently vulnerable to global gas supply shocks. As a net importer of gas, the UK is exposed to the volatility in international gas prices.[8] Wholesale gas and electricity prices soared in 2021 following Russia's invasion of Ukraine, leading the UK to spend an additional £90 billion on gas between the start of 2021 and the end of 2024. The UK government spent £78.2 billion across 2022–23 and 2023–24 in response to gas price

[5] CCC (2025), The Seventh Carbon Budget.
[6] Energy UK (2025), How to cut bills.
[7] ECIU (2025), The future is green.
[8] IMF (2023), The Energy Price Shock-Impact, Policy Responses, and Reform Options: United Kingdom.

spikes.[9] If the energy cost increase had been distributed across the UK population, it would have amounted to approximately £2,000 per person.[10] The IMF found that UK households were the worst hit by this energy price spike out of western European countries.[11]

Investing in an energy system largely based on UK-produced low-carbon power generation would insulate consumer bills from exposure to international energy prices, as well as driving decarbonisation. E3G modelled a gas price shock in 2030 equivalent to the one experienced in 2022.[12] This showed that, in a scenario with a highly renewable grid (96% renewable by 2030), the typical annual household electricity bill would rise by £71 – less than 9% – compared to central gas price assumptions. This compares to a threefold increase in the price cap following the Russian invasion of Ukraine in 2022/3, which led to electricity bills for an average household increasing from £770 in 2021 to £1,105 in 2022 – a rise of £335 – with the government having to compensate for the difference, at least to some extent.

A clean power system will reduce the UK's reliance on gas and strengthen energy security. The Clean Power 2030 Mission and Clean Power Action Plan (CPAP) are essential for accelerating this transition and positioning the UK power system fit for the future, beyond 2030 and in line with net zero by 2050. **Analysis has found that hitting the UK's 2030 clean power target could reduce the volatility of electricity markets**, resulting in a 44% reduction in the severity of electricity price spikes by 2030, compared with 2024.[13]

In the longer term, **new electricity market arrangements are needed to ensure that the wholesale electricity price is decoupled from gas prices, reducing consumer exposure to high gas prices and price spikes**. The current market, based on the economic characteristics of fossil fuels, is not suited for a low-carbon system. The ongoing review of electricity market arrangements (REMA) offers a crucial opportunity to align the market with a clean power system and ensure long-term savings for consumers.[14] The upcoming REMA decisions will have implications for all consumers, particularly for energy intensive businesses and the poorest households. The government must ensure potential unintended consequences or risks are well understood and mitigated. High energy users need clarity on the timelines and next steps for energy pricing to make investment decisions and decarbonise their operations. It is also important that decisions on REMA are aligned with wider spatial energy planning and energy policy, which will have implications for the costs of new low-carbon energy infrastructure and bills.

In the short term, the government must be prepared to manage potential gas price shocks and take decisive targeted policy actions to reduce energy bills more generally. In particular, the government must consider solutions for energy intensive industry, public bodies and vulnerable domestic consumers, who may be disproportionately affected by high energy prices and sudden price shocks.

---

[9] E3G (2023), Assessing the UK government's response to the gas crisis.
[10] ECIU (2025), Russian invasion anniversary: £140bn gas bill for UK since crisis began.
[11] IMF (2023), The Energy Price Shock-Impact, Policy Responses, and Reform Options: United Kingdom.
[12] E3G (2025), The UK's Clean Power Mission: Delivering the Prize.
[13] Daniel Navia Simon & Laura Diaz Anadon, Nature Energy (2025), Power price stability and the insurance value of renewable technologies.
[14] Michael Grubb et al, UCL Institute for Sustainable Resources (2022), Separating electricity from gas prices through Green Power Pools: Design options and evolution.

For energy intensive businesses, particularly heavy industry, **targeted support on electricity bills is vital to support international competitiveness and encourage the switch (where technically possible) from gas to electricity**. There are several mechanisms for targeted support available. The government introduced the British Industry Supercharger (BIS) in 2024, which reduces network charges and provides exemptions from some policy costs for businesses in some energy-intensive sectors. The government could further increase the maximum exemption from 60% to 90%, bringing UK network charges closer to those in key European countries. The government should consider reviewing the current BIS and the actual costs different sectors face to ensure the policy fulfils its purpose and supports decarbonisation. For example, BIS support could be based on the actual electricity price paid by businesses or where access to Power Purchase Agreements (PPAs) is limited. The government should also support greater use of PPAs for renewable energy supply and the development of a business model for electrification, learning lessons from those developed for hydrogen and carbon, capture and storage, to provide targeted support for operational expenditure and incentivise electrification.

Public bodies are disproportionally high users of gas and warrant specific attention. The government should therefore roll out a robust programme for public sector decarbonisation and increased energy efficiency. The recent Great British Energy announcement of £200 million for roof top solar for schools and hospitals was a welcome step forward.

For domestic consumers, Aldersgate Group has recommended a social tariff, as set out in the report "*The Case for a Social Tariff: Reducing Bills and Emissions, and Delivering for the Fuel Poor"*.[15] Though the landscape of energy costs for consumers has continued to evolve since the publication of the report in 2023, the following principles and recommendations remain valid:

- General taxation can fund a targeted social tariff to support fuel-poor households. Applied as an automatic discount on gas and electricity unit rates, this would significantly reduce fuel poverty. Our 2023 report recommended a 30% discount, balancing consumer protection with fiscal affordability. At the time, it was estimated this could save each of the 6 million fuel-poor households around £450 annually, costing HM Treasury £2.7bn. This tariff would align with the National Energy Action definition, automatically adjusting as energy prices fluctuate. Funding from HM Treasury would ensure fair cost recovery, prevent higher bills for other consumers, protect decarbonisation investment, and incentivise government support for energy efficiency in lower-income households.
- Policy costs applied to household energy bills for closed and social schemes (e.g. policy costs for feed in tariffs and the Warm Homes Discount) could be moved to general taxation. This would immediately lower bills and ensure progressive recovery of 'public good' costs. In our 2023 report, we calculated the saving per household would be £151 per year. Reducing policy costs this way, rather than rebalancing them across electricity and gas, avoids penalising those reliant on gas heating who currently do not have the ability to switch to a low-carbon heating technology.

Another key measure to insulate energy bills from gas shocks is to reduce energy demand, increasing the energy efficiency of buildings across the UK. Many homes in

[15] Aldersgate Group and UCL (2023), The Case for a Social Tariff.

the UK are not currently energy efficient. Of homes with an EPC rating, 58% in England and 62% in Wales were rated below band C. Only 1% of UK homes are heated by a heat pump. Support for home retrofit and energy efficiency would be beneficial as part of a wider package. For example, Energy UK found that combining policy cost rebalancing with energy efficiency would deliver up to £400 reduction in annual energy bills for households using electric heating and a £550 reduction for households eligible for the Warm Homes Discount.[16]

The government must urgently publish the Warm Homes Plan, providing certainty on timelines for delivery for both households and supply chains. For manufacturers and installers, the market is too uncertain to unlock investment to develop supply chains and training. Alongside the Warm Homes Plans, **the government must set out complementary policy to support greater uptake of energy efficiency measures**. This should include addressing the imbalance in VAT rates in the construction sector, with VAT applied to retrofit and not new build and support for the development of novel financial products such as property-linked finance to increase private investment. **Increasing public awareness and the creation of an independent national expert retrofit advice service for England** would also support households to better understand the options available to them, navigate the planning system and identify reliable suppliers and installers – all technical and lengthy tasks which act as barriers to action.

Question 3: Where should the costs of decarbonising the grid lie?

The government must consider how the costs of decarbonising the grid can be fairly met in the short, medium and long term. The wholesale cost of electricity is set to decrease through the transition to clean power; however, some costs on electricity bills are expected to increase over the short to medium term. Many of the transition costs to clean energy, such as for Contracts for Difference, have been levied on electricity bills rather than through general taxation, and these costs have increased over time.[17] Options to address costs have been set out in the question above, including support for vulnerable consumers, with further potential solutions outlined below.

One option for addressing high electricity bills and incentivising further electrification is **rebalancing the policy levies for both domestic and non-domestic consumers**. Policy costs could be funded through general taxation, gas bills or a blend of both. The rebalancing of costs must be done in a way that aims to avoid or mitigate unintended competitive distortions, as some consumers (for cost and infrastructure reasons) may not be able to electrify quickly. Rebalancing could be introduced gradually, creating an incentive and sufficient time to switch, alongside targeted support for vulnerable consumers.

Existing policies could also be adapted to spread out policy costs over time and decrease their short-term impact. For example, most new renewable energy projects, including nearly all offshore wind, are funded through Contracts for Difference (CfDs). Energy UK found that extending CfD contracts from 15 to 20 years would spread costs over

[16] Energy UK (2025), How to cut bills.
[17] Energy UK (2025), How to cut bills.

a longer period, making projects cheaper and potentially saving households £15-£20 per year.[18] The government is currently consulting on this proposal.

Ofgem has an important role to play in protecting consumers and ensuring a strategic and long-term approach is taken, working with the National Energy System Operator (NESO) towards a well-designed and cost-efficient future energy system. Anticipatory investment is also vital in building the future energy system and deliver longer term savings. The recent announcement from Ofgem granting early access to almost £4 billion of investment for crucial transmission equipment and services was a welcome strategic action.[19]

Energy efficiency and demand flexibility are key levers to reduce the cost of decarbonising and expanding the grid. **Enabling flexibility** will reduce the costs to consumers by decreasing the amount of generation and network infrastructure that needs to be built to meet future demand. For example, the National Infrastructure Commission found that demand flexibility could reduce the cost of distribution network investment by around 15%, cumulatively saving £6.7-7.9 billion by 2050.[20] The government needs to work with NESO, industry and consumers to maximise the uptake and benefits of flexibility.

The government should make consumer tariffs more flexible and fairer by **establishing market-wide Time of Use Tariffs (TOUs) in the future**. Success will rely on acceleration of the smart meter rollout, half-hourly market-wide settlement, and collaboration with consumers and suppliers on TOU design and protections. Suppliers should be required to install smart pre-payment meters for vulnerable households, help clear debts, and create payment plans. The cost of this support should be borne by HM Treasury.[21]

Is it practical for consumer bills to be reduced by £300 before the end of the Parliament?

As described in the previous questions, consumer bills have different components and options are available to help reduce energy costs. **The government must develop a coherent policy package, bringing together the benefits of the transition to a clean energy system, energy efficiency measures and market reform, alongside other policy measures, to ensure that the high costs of energy bills can be reduced**. Achieving this will require careful policy design and collaboration across government, NESO, Ofgem, and wider stakeholders with relevant expertise and experience. It is also likely to require some additional taxpayer-funded interventions.

Policy certainty, in particular timelines for government decision-making or implementation of new policy and regulatory frameworks, is crucial to create confidence for both households and businesses to invest and adopt measures for the clean energy transition and energy efficiency. The Clean Power mission has acted as a strong signal to households, businesses and investors. The government must build on this with greater certainty on the Warm Homes Plan, REMA and other key decisions. For example, the government must bring forward the strategic decision on the roles of hydrogen and electrification in home

[18] Energy UK (2025), How to cut bills.
[19] Ofgem (2025), Britain on fast track to net zero with early access to £4 billion infrastructure investment.
[20] National Infrastructure Commission (2025), Electricity distribution networks: creating capacity for the future.
[21] Aldersgate Group and UCL (2023), The Case for a Social Tariff.

heating. Greater collaboration with the EU on energy trading also has the potential to support the UK power system and reduce costs.

Finally, the government must ensure the transition to a clean power system can be done efficiently. This includes **availability of required skills, supply chains** and **a planning system** that enables renewable and grid infrastructure development at pace, while protecting nature and communities' rights to input. Our recent report *Electric dreams: how the planning system can help deliver the UK's low-carbon energy* – published with RenewableUK and CPRE, the countryside charity – sets out specific recommendations to address challenges in the current system.[22]

[22] Aldersgate Group, CPRE and RenewableUK (2024), Electric Dreams: How the planning system can help deliver the UK's low-carbon energy.