

Energy Saving Trust

Response to the Environmental Audit Committees Call for evidence: How can the UK reduce reliance on oil and gas and accelerate the transition to net zero?

Energy Saving Trust

Energy Saving Trust is an independent organisation dedicated to promoting energy efficiency, low carbon transport and sustainable energy use to address the climate emergency. A trusted, independent voice, we have over 25 years' sector experience. We provide leadership and expertise to deliver the benefits of achieving carbon reduction targets: warmer homes, cleaner air, healthier populations, a resilient economy and a stable climate. We welcome the opportunity to respond to this consultation, we have focused our response on areas of most relevance to energy efficiency, fuel poverty, low carbon heat and onshore energy generation.

Securing sustainable energy supplies and protecting households from high prices

1. How effective will the Government's Energy Security Strategy be; at protecting households from high fossil fuel prices?

Energy Saving Trust acknowledge that the Strategy is highly ambitious in its intention to expand home-grown energy production. Increased production through nuclear, offshore wind and hydrogen will radically alter the energy landscape of Britain in the future and, in the long-term, help to divest the UK economy from fossil fuels with the intention to bring down consumer bills¹. However it is not sufficient to meet the challenge of today's supply and affordability crises. An effective energy security strategy must begin by considering demand as well as supply side issues, addressing how much energy we need to use as well as its source. This Strategy is largely silent on energy demand in contrast to the latest IPCC report which dedicated an entire chapter to demand side measures². In this way, the Strategy conflicts with the urgency of the current crises by omitting to focus on measures which would have supported people in the near term, namely through energy efficiency and the electrification of heat. The Strategy's relevance to protecting households is based in long-term ambition and does not help households in the immediate context of rapidly rising global energy costs and the Russian invasion of Ukraine – events which have heightened the need for increased energy security in Britain now.

Millions of households in the UK are struggling with energy and wider costs of living today and many more will struggle come autumn when the energy price cap is set to increase again³ and beyond if further support is not provided before then. Support will be more effective if it is proactive rather than reactive. The impacts of recent price rises are already being seen, with increasing numbers of prepay customers disconnecting themselves,⁴ as Citizens Advice note the number of callers seeking help unable to afford to top up their meters is already higher than the

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total figure for 2021. Without further support, more households will self-disconnect as a last resort and experience the consequences of not having access to energy. The severe health and social impacts of cold homes are widely known⁵ and will put health services under more pressure at a time when there are currently 6.4 million people⁶ on NHS waiting lists to start treatment.⁷ The key source of our major energy security vulnerability is inefficient housing⁸ and tackling energy use in buildings, especially heating buildings, is a key part of demand.⁹ Many of our European neighbours responded to the 1970s oil shocks by insulating buildings whereas we moved to gas heating without improving our building stock. Energy Saving Trust believe that we now need an energy demand strategy, a plan for a sustained long-term nationwide energy efficiency programme to help people improve their homes and reduce their demand. The Energy Security Strategy overlooks the cheapest and quickest ways of reducing energy costs in favour of more expensive¹⁰ options which take longer to deliver, and some of which have been difficult to deliver in the past¹¹.

We know that insulating homes reduces bills. Energy and Climate Intelligence Unit (ECIU) analysis reveals that existing energy efficiency installations between 2009 and 2019 will save 6 million homes £200 on annual gas bills from April 2022.¹² Likewise, the Energy Company Obligation (ECO) programme has saved low-income customers £17.5bn in lifetime energy bills since 2013¹³, at a cost of £5.63bn, for which the average saving for homes improved under ECO at £290 per year. The Energy Efficiency Infrastructure Group (EFIG) estimates that, had support for energy efficiency measures that was withdrawn in 2013 remained, 9 million more homes would have been insulated between 2013–22, saving £4.4bn in energy bills and putting millions of families in a better position to weather the current crisis.

The Strategy won't bring energy bills down in the near term, nor will it alter our supplies of energy anytime soon and consequently it extends our reliance on fossil fuels. This is a long-term strategy to protect households from high fossil fuel prices, but it needs a complimentary demand strategy focusing on both long-term and short-term impacts to help support people now and reduce future energy needs.

2.Should Government policies on onshore energy generation or exploration be revised in light of the energy security situation? Given the current and potential speed of deployment, what low-carbon energy sources are most likely to secure supplies of affordable and sustainable energy rapidly?

Yes - Energy Saving Trust strongly supports the deployment of onshore renewables, particularly onshore wind. As the Energy Security Strategy notes, "Onshore wind is one of the cheapest forms of renewable power" and can be rapidly deployed with huge potential to benefit local communities, providing the delivery certainty demanded by this crisis. We believe provision should be made for the accelerated deployment of onshore wind. Existing renewables are already helping to shield household energy prices and faster roll out would go much further in doing so. With onshore wind and solar delivering at half the price of nuclear generation,¹⁴ it should be a priority in a cost-of-living crisis and following the Russian invasion of Ukraine. We welcome the Energy Security Strategy's ambition for offshore wind, increasing the pace of deployment to deliver up to 50GW by 2030. We are pleased to see this significant commitment to renewables as focus must now be the long-term reduction and removal of fossil gas power

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generation from the system, as the primary driving force behind increasing electricity bills. We are likewise pleased to see a drive for solar generation in the Strategy, “a five-fold increase in deployment by 2035” is highly ambitious, proportionate to the current crisis and we look forward to seeing the detail on how this might be delivered. Solar farms are even quicker to deploy than onshore wind and have an important role to play in the makeup of our energy generation. One key area will be the facilitation of increased storage on the grid to help balance out intermittency of renewable generation sources.

It is our view that the Strategy missed a significant opportunity for the UK government to pull on all the levers available to “exploit the potential of all renewable technologies”.¹⁵ Aside from its relative cost and speed of deployment, a further unique benefit delivered by renewable energy is the potential for community ownership. It would not only help meet net zero obligations, but also allow the generation of income for communities, contributing to both economic regeneration and community empowerment and play a role in delivering a just transition to net zero.

Examples of this can be seen through our work via the Scottish Government’s Community and Renewable Energy Scheme (CARES) in Scotland and the Welsh Government Energy Service in Wales¹⁶ to generate locally owned, renewable energy and helps to address the barrier of communities otherwise being unwilling to host renewable generation. In their latest report¹⁷, the Welsh Government Energy Service showed that between 2018-2021 they had generated £212 million of local income and savings. In 2020-21 alone, there was total investment of £43 million into renewable energy and also energy efficiency, and fleet electric vehicle projects, expected to provide £79 million in savings and income for the public sector and community groups over their lifetime, with the supported projects saving 172,500 tons of CO2.

Energy Saving Trust is also a partner in Local Energy Scotland, a consortium that manages CARES on behalf of the Scottish Government. CARES encourages the local or community ownership of renewable energy across Scotland. The goal of CARES is that communities across Scotland are engaging, participating and benefiting in the energy transition to net zero.

The Strategy refers to “the range of views” as the reason for not backing further onshore wind projects. However, the UK Government’s own surveys contradict this narrative. Data from the Department for Business, Energy and Industrial Strategy (BEIS) showed that only 4% of the public oppose onshore wind¹⁸, in comparison to 14% that oppose nuclear, which forms a major part of the Strategy. Onshore wind is an untapped opportunity and there should be an urgent review of and update to planning and consenting guidance for onshore wind to ensure it encourages and enables developments considering the energy security situation, with a wealth of benefits at both local and national level.

3. Is the Government doing enough to protect the high number of households likely to fall into fuel poverty as a result of high fossil fuel prices over the coming year? To what extent, and how rapidly, could energy saving, or efficiency measures help to reduce reliance on oil and gas and relieve fuel poverty?

Whilst we acknowledge the measures (such as the expanded schemes, energy bill rebate and council tax cut) to support households implemented by the UK government go some way to mitigating the current crisis, they do not go far enough because primarily they do not target the source of fuel poverty in the UK, our leaky homes. As raised in our response to the Energy

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Company Obligation (ECO4) consultation¹⁹, while the Warm Homes Discount (WHD) provides a lifeline to vulnerable consumers every winter, and the proposed improvements to the scheme will enhance this work, the WHD by itself does not tackle the root causes of high energy costs and fuel poverty, which is reducing energy demand. As noted by E3G retrofitting the UK's buildings supports affordability and energy security, while supporting the transition to net zero. Energy efficiency measures remain the single fastest way to reduce energy demand and therefore bills in the short term and must be a priority action to protect households and help to address the record numbers in fuel poverty we are seeing. The support measures must also be proportionate to the number of people needing support to retrofit their homes. The majority of houses in the UK are currently energy inefficient therefore protecting consumers requires a joined-up, nationwide approach which should complement and be additional to the schemes already in place, including the programmes delivered by devolved governments in Scotland, Wales and Northern Ireland.

The speed at which energy saving, or efficiency measures, would *reduce reliance on oil and gas and relieve fuel poverty* depends entirely on the extent of commitment and investment by UK government to drive a nationwide programme of energy efficiency, to insulate every home to decent standards and install heat pumps in place of gas boilers. We know the value of these measures and know the cost of failing to take action, with current rates of installation representing just 5% of the levels they were in 2012 due to scaling back of UK government policies aimed at improving the efficiency of existing buildings. Carbon Brief analysis²⁰ shows that energy bills in the UK are nearly £2.5bn higher now than if climate policies had not been scrapped from 2013. This is equivalent to £60 per household more per year under the price cap rise expected this winter.²¹ As we have experienced through our delivery of Home Energy Scotland²², energy efficiency programmes are best supported by a comprehensive, impartial advice service. We detail the catalytic features of advice and support in our answer to question 7.

4. Which elements of the International Energy Agency's 10-point plan to Reduce Reliance on Russian Natural Gas and Cut Oil Use are relevant to the UK and which could the Government seek to implement as a priority?

Energy Saving Trust think several elements of the 10-point plan are relevant to the UK, particularly points 1,4,6,7,8, 9 and 10. It is our view that points 4,6,7 and 8 are most urgently relevant due to the UK's underutilised abundant natural resources and our inefficient housing stock²³.

4/ Accelerate the deployment of new wind and solar projects – Although the Energy Security Strategy includes positive ambitions for offshore wind, there is a significant missed opportunity for onshore wind which could be deployed quickly to support local communities and provide cheaper energy to households.

6/ Enact short-term tax measures on windfall profits to shelter vulnerable electricity consumers from high prices. Energy Saving Trust supports a windfall tax on fossil fuel companies and using this windfall to support vulnerable consumers. For further details please see our response to question 5.

7/ Speed up the replacement of gas boilers with heat pumps– We believe boiler replacement targets could be more ambitious and that targets should be set for all tenures. Details around

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the delivery of these targets are currently lacking. An accelerated programme to replace gas boilers with low carbon heating is needed if the UK government is to meet its target to ensure as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency rating of Band C by 2030²⁴; currently just 40% are rated EPC C.²⁵ With fewer than 250,000 heat pumps in operation in 2019²⁶, we are some distance from meeting the UK government’s target of 600,000 installations yearly and the CCC’s recommended 900,000 yearly target²⁷. One option would be to expand the Boiler Upgrade Scheme to support an increased number of low carbon heating installations each year as this currently only supports approximately 30,000 heat pumps over 3 years.

8/ Accelerate energy efficiency improvements in buildings and industry – We detail the widely known benefits of energy efficiency improvements in our answer to question 3.

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Tax and the fossil fuel industry

5.What are the pros and cons of a windfall tax levied on fossil energy producers? How should the revenue from any levy be allocated?

Energy Saving Trust would support a windfall tax levied on the additional and unexpected revenues of fossil fuel extraction companies. This has already been seen in other European Nations²⁸. In the context of the current cost-of-living crisis, it would be a proportionate action where companies have made profits far in excess of what they were expecting. In what was described as a “Momentous year for Shell” their profits for 2021 rose to \$19.3bn compared with \$4.85bn the year before, with BP posting a profit of \$12.8bn.²⁹ At the same time the End Fuel Poverty Coalition (EFPC) has warned that the energy crisis could leave 8.5 million UK households unable to heat their homes, or 1 in 3³⁰ facing profound widespread consequences. Citizens Advice have already reported calls to their Help through Hardship advice line rising by almost 50%³¹ evidencing the urgent need for swift action, with prices due to rise further in the autumn. It is our view that the revenue from a windfall tax should be spent on both immediate and long-term actions. Immediate support is needed for the most vulnerable households alongside long-term investment in the low carbon transition and a nationwide energy efficiency programme prioritising those households most in need. Such a windfall tax is estimated to raise up to £3.9bn in revenue³² which could as a first step provide a significant one-off payment to households struggling with bills to relieve some of the burden. As a permanent investment in lowering bills, more than half of the revenue accrued should be used to support low-income households insulate their homes, taking total investment by this government beyond the outstanding 2019 Conservative manifesto pledge on energy efficiency spending³³. Regardless of further movements on global energy markets, insulating homes reduces energy bills and is a measurable way to support people right now. We were encouraged to see the removal of VAT for installations and insulation in the Spring Statement, but we must go further especially for those consumers who cannot afford to upgrade their homes themselves.

As raised in the letter we co-signed dated 13th January to the Prime Minister, Chancellor of the Exchequer and Secretary of State,³⁴ the benefits of energy efficiency are well understood. Improving the efficiency of the worst performing homes, including off-gas grid and older rural properties, could provide average bill savings of over £500 every year per household, an aggregate saving of around £8bn.³⁵ Using a windfall tax to improve our leaky housing stock by

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making homes more comfortable and efficient, and cheaper to heat by insulating and installing low carbon heating systems such as heat pumps, the UK government would tackle both the climate crisis and cost of living crisis. This programme of efficiency would also drive markets, give confidence to industry and be part of the levelling-up agenda.

Contrary to the suggestion that a windfall tax would deter investment from fossil fuel companies, BP's Chief Executive Bernard Looney has said the company will continue with all UK investment if there were a windfall tax.³⁶³⁷ The argument of stifled investment does not consider that a windfall tax is unexpected, and so you cannot disincentivise risk-taking which was not taken, in this case the extent of the windfall.

A letter from Business and Energy Secretary Kwasi Kwarteng has asked energy companies for evidenced plans of their reinvestment of profits.³⁸ We do not believe this encouragement to invest should be in place of a windfall tax, but rather exist alongside it.

7.How can Government phase out support for fossil fuels whilst most effectively supporting households through the transition?

Advice provision in England

A nationwide energy efficiency scheme supported by the provision of a comprehensive, impartial and independent advice service is needed for England, building on the example of Home Energy Scotland (HES) to accelerate our transition to net zero. We know through our work via HES that the provision of a comprehensive nationwide advice service drives uptake of funding available for energy efficiency schemes and matches the right homes with the right measures. Increased uptake invigorates the supply market, improved energy efficiency of buildings results in lower energy demand, lower bills, lower carbon emissions and improved wellbeing. A fully supportive advice service allows money already committed to be fully utilised through maximum delivery and helps to avoid many of the issues that have impacted previous energy efficiency and home improvement schemes³⁹. We are encouraged to see improved advice and support for consumers and small businesses in the Energy Security Strategy, we await detail on how this advice provision will help households in the short-term, who are in need of support and advice on how to reduce their energy bills this winter.

In England advice provision is inconsistent depending on what local support services exist, so it is not surprising that the delivery of energy efficiency policy is variable and patchy across the UK. Vulnerable groups most in need are not always eligible for support, likewise vulnerable consumers are often unaware when they are eligible for support. A comprehensive advice service would bridge these gaps to support a consistent, reliable approach across the board enabling a simple consumer journey. In supporting people, the UK government should aim for consistent outcomes for all households regardless of location.

Energy Saving Trust believe England should now be building on the example HES, which provides customers with “one-stop shop” information about and access to a range of schemes funded by the Scottish Government to overcome known financial barriers to the installation of energy efficiency improvements and home renewables, for owner occupiers, tenants and private

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landlords in Scotland. Ensuring that, where eligible, customers can be referred to the most appropriate programme specific to their personal circumstances. The specialist advice service has established itself as a key part of the domestic low and zero emissions heating, other renewables and solid wall insulation infrastructure in Scotland.

HES provides advice that is free, impartial, bespoke⁴⁰ and tailored to personal circumstances and property characteristics. This advice enables a simple customer journey and works with existing providers, it does not replace them. This service results in improved uptake of measures, greater consumer engagement and protection and improved energy efficiency, further resulting in lower bills and improved wellbeing alongside reduced carbon emissions. Each year, HES helps more than 90,000 customers in Scotland and even with these very large volumes, customer satisfaction is at 97%. 69% of total savings achieved by customers can be directly attributed to HES advice provided. This means an average lifetime saving of 4.3 tonnes CO₂ and £1,600 financial saving per customer advised. There is significant demand for this kind of service for example in 2019 HES delivered 315,000 advice interactions and saved almost 440,000 tCO₂ lifetime. With the current energy and cost-of-living crisis, demand is only going to increase throughout 2022 and longer term will increase further as climate policy targets arrive.⁴¹

Finance for retrofit

A key enabler to driving retrofit is the unlocking of low-cost finance. The Energy Efficiency Infrastructure Group (EEIG) has published a Better Building Investment Plan, outlining measures to effectively mobilise public, private and blended capital.⁴² This is an important part of stepping up pace in the delivery of retrofit and meeting 2050 targets. We were therefore pleased to see steps to boost green homes finance and increased innovation funding in the Energy Security Strategy as well as work with the UK Infrastructure Bank (UKIB) exploring investment opportunities around energy efficiency improvements. In our response to the Treasury Interim report on Net Zero⁴³ we highlighted the property assessed clean energy (PACE) model⁴⁴ widely used in the United States of America, a long-term loan attached to the property or land value rather than to a borrower. If similar style loans could be offered in the UK, at a low enough interest rate with a longer timeframe, then in most cases they could be repaid within the energy bill savings thereby avoiding any increase in costs for consumers whilst meeting the upfront costs of measures. We think a similar model should be considered and adopted in the UK as a key constituent element to mobilise finance for energy efficiency.

Sustainable travel

Our reliance on fossil fuel-powered personal and business vehicles must be rapidly addressed from the perspective of action on air quality and climate change as well as energy security. The UK is more reliant on Russian oil than Russian gas and around 20% of the diesel imported to the UK is Russian in origin, moving towards electric vehicles powered by UK renewable electricity and supporting the growing UK electric vehicle components manufacturing sector will reduce our reliance on overseas fossil fuels, reduce our climate and environmental impacts and support UK business. However, we cannot simply replace all fossil fuel vehicles with electric alternatives, we must ensure that fewer journeys are taken by personal vehicles in favour of journeys completed

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by green and effective public transport links which are integrated with safe active travel routes. The multiple benefits of achieving such a network of active and public transport cannot be overstated, helping to level up regions and support local economies whilst tackling climate change and public health concerns.

[We have not answered questions 6, 8-12]

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