



E3G

BRIEFING PAPER JANUARY 2022

THE ENERGY BILLS CRISIS A GREEN, FAIR & RESILIENT RESPONSE

JULIET PHILLIPS

Soaring global gas prices – combined with a perfect storm of domestic factors – are fuelling a costs-of-living crisis in the UK and could have economy-wide implications. Energy bills are set to rise to £2,000 per year from April in a price hike which is untenable for most households, and a disaster for those already in fuel poverty. The response must prioritise emergency support for vulnerable households. We must also start now towards building a greener, fairer and resilient system as the only long-term solution for preventing future crises.

This briefing unpacks how the UK's exposure to volatile gas markets is fuelling a costs-of-living crisis; exacerbated by a toxic mix of additional pressures including energy supplier failures, rising living costs and longstanding underinvestment in green homes. It sets out near-term actions to protect households from sharp price increases, and longer-term priorities to rebuild for resilience.

The costs associated with inaction could be high and economy-wide – with a one percentage point rise in inflation leading to considerably more than £10bn a year in government costs.¹ Goldman Sachs predicts that rising fuel bills could push inflation up by around two percentage points.² Meanwhile, there are economic benefits to be gained through measures to cut bills and support green industries.³

Emergency support for households should focus on reducing bills and increasing people's ability to afford to keep their homes warm. Recommendations include:

¹ <https://www.spectator.co.uk/article/boris-and-keir-have-the-energy-crisis-all-wrong>

² <https://inews.co.uk/news/politics/energy-price-cap-increase-inflation-rise-worsen-cost-of-living-crisis-1390647>

³ https://www.theeig.co.uk/media/1091/eeig_report_rebuilding_for_resilience_pages_01.pdf



E3G

-
- **Protect fuel poverty scheme funding while removing legacy policy costs from electricity bills**, to be paid via the exchequer instead – reducing bills by around £160 per year and paving the way for clean electric heat. The Energy Company Obligation and Warm Home Discount should remain on bills to retain their stable funding settlement for fuel poverty and must be maintained at current levels. Suspending funding for these schemes would be self-defeating.
 - **Extend and increase the Warm Home Discount**, which currently provides a £140 annual discount for households on Pension Credit and some low-income working-age households. The annual discount needs to be increased to offer proportionate relief from April and expanded in scope - for example to all households on Universal Credit. The expansion must be paid for by general taxation, rather than further levies on energy bills.
 - **Offer a one-off payment of £600 for those eligible for the Cold Weather Payment**, in light of a potential average bill increase expected from April.
 - **Raise the basic generosity of Universal Credit** as a targeted means of supporting lower income households afford rising costs of living.
 - **Fund emergency measures in part through a windfall tax on the fossil fuel extraction industry**, due to make profits nine times higher due to the surge in wholesale prices. There is precedent for doing this, including in 2011 when oil and gas prices spiked.⁴ There is an even more compelling case to do this now, since tax rate for oil and gas companies has significantly reduced since 2011.

Immediate steps to build long-term resilience for a green and fair future include:

- **Investing in a long-term nationwide retrofit programme**, fulfilling outstanding Conservative Manifesto commitments for low-income households; and establishing a new subsidy scheme open for all households.
- **Supporting a smooth transition to clean heating sources**, to reduce household reliance to fossil gas through steadily accelerating the affordable and effective delivery of heat pumps, heat networks and complementary measures – such as green training, public engagement and consumer advice.
- **Accelerating UK green energy security through investing in renewables, electrification, flexibility and storage** to reduce long-term reliance on volatile international gas markets. The energy crisis should spur faster and deeper investment and collaboration on green energy security. It is not a reason to increase domestic production of North Sea fossil fuels or overturn the moratorium on fracking for shale gas.
- **Funding sources for these longer-term solutions could include the £16bn green gilt, and UK Infrastructure Bank.**

⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902798/Statistics_of_government_revenues_from_UK_oil_and_gas_production__July_2020_for_publication.pdf



E3G

1. Unpacking the problem: The key drivers of the costs-of-living crisis

There are many factors contributing to the looming cost-of-living crisis, but the root cause is the UK's exposure to and reliance upon international gas markets – which have seen prices soar in recent months. Further hikes are still possible if supplies are disrupted or a cold snap boosts demand for gas heating. Various underlying factors have fanned the flames of the problem in the UK, exacerbating the impacts of increasing prices. The combination of these issues could lead the number of UK households living in fuel poverty to climb to the highest level on record, with National Energy Action warning at least 2 million more homes could slip into fuel poverty compared with the start of 2021, taking the total to 6 million households.⁵ The gas crisis is likely to have economy-wide and systematic impacts and costs, making a proactive approach the prudent course of action.

Exposure to volatile international gas markets the root cause of the problem

Energy costs soared in 2021 as the rebounding global economy drove up demand and, in Europe, Russia reduced gas supply. As of December 2021, European gas prices have jumped more than 600% since January 2021.⁶ Low storage levels, competition from Asia for liquefied natural gas cargoes and doubts over Russia's longer-term intentions have continued to push European prices higher – with experts forecasting continued volatility and high prices to continue at least for the next 18 months. Mixed signals from Russia continue to be reported, potentially increasing Europe's exposure to further price shocks in the future.⁷

The interconnected nature of the global gas market means that fundamentally, supply/demand issues feed through to prices everywhere – regardless of the source of the gas. Imported gas represented 47% of the UK's total usage in 2020.⁸ Norway accounted for 55% of UK gas imports in 2020, and 42% arrived as Liquefied Natural Gas (LNG) – of which Qatari, Russian and US LNG imports accounted for 87% of all LNG imports. Over 85% of UK households are connected to the fossil gas grid, and the UK's cold and leaky housing stock means that UK households consume much more fuel than would be required if they were efficient and well-insulated.

⁵ <https://www.theguardian.com/society/2022/jan/01/6m-homes-uk-pay-energy-bills-price-hike-fuel-poverty>

⁶ <https://www.ft.com/content/aa51e2fe-3da1-47cb-aa88-61f92e954e41>

⁷ <https://www.express.co.uk/news/science/1544090/putin-news-russia-china-gas-deal-eu-energy-crisis-ukraine-power-of-siberia-nord-stream-2>

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1032260/UK_Energy_in_Brief_2021.pdf



E3G

Rising gas prices have driven up costs of electricity. Analysis by Ember found that UK electricity prices tripled in 2021, with 86% of this caused by the soaring costs of fossil gas imports.⁹ Despite successful strides towards decarbonising the power supply through tapping into UK renewables potential (which in turn has cushioned exposure to rising gas prices) a markable portion of the UK's electricity generation still relies on fossil gas (see figure 1).

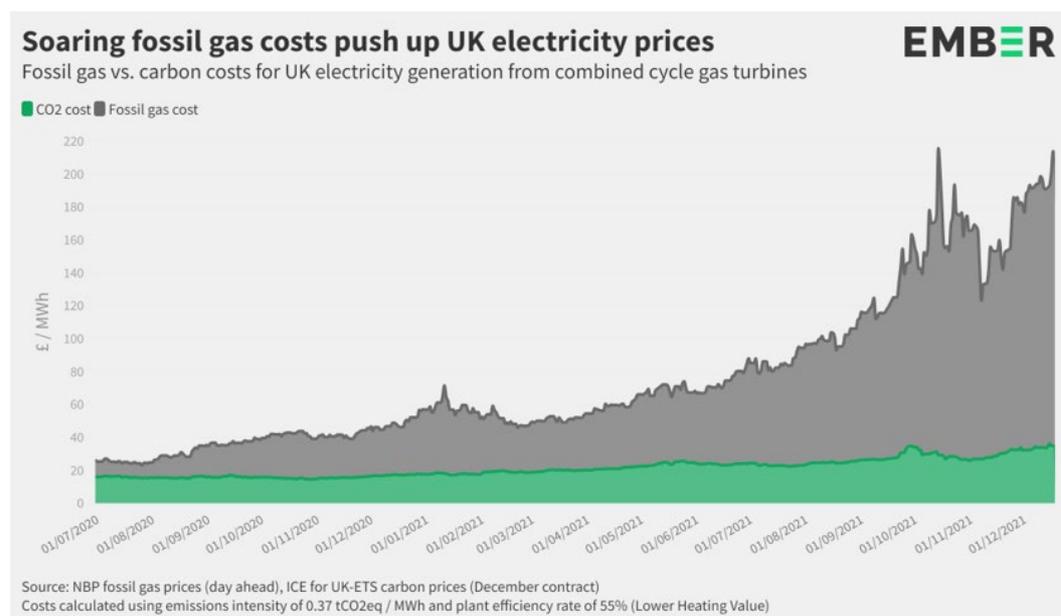


Figure 1: How fossil gas price increases have driven up electricity costs (Source: Ember)

These factors sit at the heart of the looming cost-of-living crisis, driving up energy and fuel bills (see figure 2). Rising prices are also directly impacting industrial energy users, particularly the most energy intensive sectors.¹⁰ Furthermore, over 30 energy companies ceased trading in 2021 leaving over two million customers dependent on the safety net provided by the market regulator, Ofgem, and Bulb Energy – with 1.7 million customers – placed in Special Administration.¹¹ These consequences have a multiplier effect on the spiralling cost of living crisis, increasing the costs of essential goods and services, as well as driving inflation.

⁹ <https://ember-climate.org/commentary/2021/09/21/fossil-gas-uk-electricity-prices/>

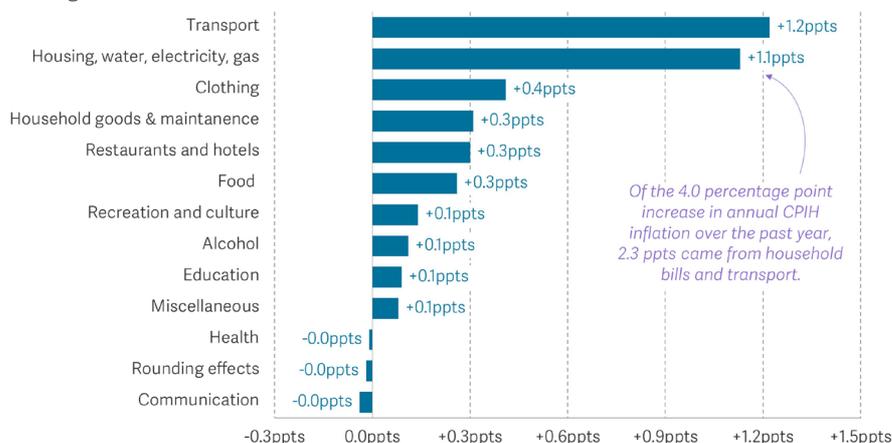
¹⁰ <https://www.theguardian.com/business/2021/oct/08/energy-crisis-could-halt-factory-lines-industry-leaders-warn>

¹¹ <https://www.forbes.com/uk/advisor/energy/failed-uk-energy-suppliers-update/>



Inflation rise has mostly been driven by household bills and transport

Change in contribution to annual CPIH between November 2020 and November 2021: UK



Source: RF analysis of ONS, Consumer Prices.

@resfoundation 6

Figure 2: Key drivers of change underlying the Consumer Prices Index including owner occupiers' housing costs (CPIH) (Source: Resolution Foundation)

A mix of domestic factors fans the flames of the crisis

Many countries are dealing with the impact of rising gas prices, but domestic factors will shape how the UK will be impacted and should respond.¹²

Changes to the energy price cap disproportionately impact the poorest households, exacerbated by cuts to Universal Credit

The UK's energy regulator, Ofgem, sets the energy price cap to limit the price a supplier can charge per unit of electricity and gas. In August 2021, Ofgem's latest price cap was announced, rising to £1,277 per year, up £139.¹³ Investec has estimated the energy price cap will have to be lifted to £1,995-a-year per household from April when the limit is next adjusted.¹⁴ Cornwall Insights predict it could spike to £2,240 a year at the following quarterly revaluation in August 2022, without a significant fall in energy prices globally.¹⁵ The April 2022 cap increase will affect far more households than past changes, due to the absence of fixed tariffs for the

¹² The Resolution Foundation has outlined in detail how price rises will likely continue to outstrip pay growth, with rising taxes and energy bills fuelling costs of living crisis <https://www.resolutionfoundation.org/app/uploads/2021/12/Labour-Market-Outlook-Q4-2021.pdf>

¹³ <https://www.energyhelpline.com/news/ofgem-energy-price-cap-increases-by-139>

¹⁴ <https://www.ft.com/content/17b2f2a5-3f84-4bd5-90da-3a29af25bdd7>

¹⁵ <https://www.independent.co.uk/business/martin-lewis-warns-soaring-energy-bills-could-force-eat-or-heat-dilemma-b1986160.html>



E3G

second half of 2021 and the fact customers moving from failed suppliers are being moved onto standard tariffs.¹⁶ Ofgem is reviewing how it sets the price cap, but this is unlikely to have much effect on cost increases.

Rising energy prices disproportionately impact low-income households, who spend over three times the amount of their weekly expenditure on fuel bills compared to high earners.¹⁷ On average, households spent 4.2% of their total expenditure on fuel for their homes in 2019/20. Households whose income falls in the lowest 10% in the United Kingdom spend, on average, 7.7% of their weekly spend on fuel for their homes. The top 10% of households in terms of income, spend only 2.7% per week of their weekly spend on domestic fuel. Recent YouGov polling found that 60% of households on low to medium incomes could not afford to spend an extra £50 a month on their cost of living.¹⁸ Rising prices will therefore be felt most acutely by low-income households, and especially by out-of-work households whose income has already been cut back by £1,000 last autumn when the £20/week uplift to Universal Credit was removed.¹⁹

Impact of energy supplier failures and substandard regulation

Citizens Advice estimates that supplier failures since Aug 2021 will cost consumers £2.6 bn – around £94 per customer from 2022. Government has set aside a further £1.7 bn of taxpayer money for Bulb's failure.²⁰ Failures have been triggered by unpreparedness for soaring energy prices; which was in part enabled through inadequate regulation of the energy market – with dozens of companies entering the market with limited checks from 2010. Despite warnings from Citizens Advice and others, it was only in 2019 that Ofgem brought in new rules on market entry, and in 2021 to improve financial resilience. Ofgem is consulting on changes which would spread the cost of bailing out the customers of failed suppliers, potentially over several years instead of one larger hit to bills.²¹ It has also recently published a raft of new measures to boost financial resilience in the energy sector.²²

¹⁶ <https://www.resolutionfoundation.org/app/uploads/2021/12/Labour-Market-Outlook-Q4-2021.pdf>

¹⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1032260/UK_Energy_in_Brief_2021.pdf

¹⁸ <https://yougov.co.uk/topics/economy/articles-reports/2021/10/27/cost-living-can-britons-afford-rising-bills>

¹⁹ <https://www.resolutionfoundation.org/app/uploads/2021/12/Labour-Market-Outlook-Q4-2021.pdf>

²⁰ <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/market-meltdown-how-regulatory-failures-landed-us-with-a-multi-billion-pound-bill/>

²¹ <https://www.independent.co.uk/news/uk/ofgem-households-financial-times-b1984490.html>

²² <https://www.ofgem.gov.uk/publications/raft-new-measures-boost-financial-resilience-energy-sector>



E3G

Impacts of the pandemic and WFH

The ongoing pandemic and working from home advice is increasing the amount of household energy consumption. Full time workers saw an extra £100 added to their monthly household energy bill on average over the 2020-21 winter.²³ Bright Blue found 43% of homeworkers report ‘inadequate heating’ has been an issue at least once – with most disabled respondents reporting this to be the case.²⁴

Supply chain challenges exacerbate rising costs of living

Supply chain disruptions are causing cost increases in essential items and services, including food prices – grocery inflation rose to 2.1% in October 2021,²⁵ leading retailers to hike prices.²⁶ A survey of more than 1,000 UK businesses carried out by the British Chambers of Commerce found that when asked if they had seen a change in the price of their goods or services in the past year, 80% reported increases – with 46% reporting significant increases.²⁷

Decades of underfunding energy efficiency and clean heat keeps household reliance on gas high

The majority of UK homes continue to remain hooked on expensive gas due to underfunding and plateauing action to reduce energy demand and switch to clean heating alternatives to fossil gas, such as heat pumps. The last time energy bills surged in 2013, the Warm Front programme to insulate low-income homes was abolished and the Energy Company Obligation (ECO) levy was cut in half. This led to a 90% cut in the number of loft and cavity wall insulation measures being installed in UK homes. This was a highly damaging and counterproductive measure, leaving millions of households more exposed to the current price shocks than would have been had the scheme been continued.

The Government continues to underfund home decarbonisation, with the Energy Efficiency Infrastructure Group estimating a public investment gap of around £10

²³ <https://www.theguardian.com/business/2020/oct/04/working-from-home-in-uk-over-winter-will-add-100-to-fuel-bills>

²⁴ <http://www.brightblue.org.uk/wp-content/uploads/2021/12/No-Place-Like-Home-The-benefits-and-challenges-of-home-working-during-the-pandemic.pdf>

²⁵ <https://www.bbc.co.uk/news/business-59222168>

²⁶ <https://www.independent.co.uk/business/majority-of-retailers-set-to-raise-prices-due-to-supply-chain-issues-b1938410.html>

²⁷ <https://uk.news.yahoo.com/supply-chain-price-rises-bcc-uk-business-223036533.html>



E3G

billion over the next three years for getting on track for net zero.²⁸ Of English households with below average incomes living in the least energy efficient homes, 81% are currently ineligible for nationally available government support.²⁹

3. Priorities for a more resilient system

Steps must be taken to address both the symptoms and the causes of the energy bills crisis. This means providing emergency support for households this winter and spring; as well as prioritising longer-term measures to reduce exposure to future energy bills crises by significantly reducing UK reliance on expensive and polluting fossil gas. While actions like home decarbonisation cannot solve the problem overnight, without an eye for the bigger picture and long-term vision, we risk sleepwalking into another energy crisis in the years ahead.

Emergency support for households this winter and spring

Emergency support should focus on reducing bills and increasing people's ability to afford to pay, especially the most vulnerable. Recommendations include:

- **Shift eco-levies from electricity bills into general taxation, while protecting funding mechanisms for tackling fuel poverty.** Around a quarter of electricity bills are currently composed of legacy policy costs, including for schemes like the Renewables Obligation and Feed-in-Tariffs.³⁰ These schemes have been crucial to launching a clean energy revolution, with wind power now the cheapest power source in the UK. But it is now time to remove renewable power legacy costs from power bills, to be paid for more progressively via the exchequer instead. Removing renewables legacy policy costs from electricity bills could reduce bills by around £160 per year.³¹ Reducing the cost of electricity will also make switching to clean, electric heating (like heat pumps) more attractive.
- **The Energy Company Obligation (ECO) levy should remain on energy bills and kept at the level** already planned for 2022 to 2026 (£1bn per year) as this is a crucial long-term funding mechanism for reducing fuel poverty, and the only nationally available energy efficiency support for the most low income households. It would be a short-sighted and counterproductive blow

²⁸ https://www.theeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf

²⁹ <https://www.e3g.org/publications/responding-to-uk-gas-crisis/>

³⁰ <https://www.ofgem.gov.uk/energy-advice-households/costs-your-energy-bill>

³¹ <https://www.cornwall-insight.com/with-great-power-comes-great-responsibility-what-can-be-done-for-customers-and-suppliers-in-these-challenging-times/>



E3G

to households and industry to suspend ECO funding, even for a limited timeframe – putting jobs at risk, and stalling action to reduce fuel poverty.

- **Extend and increase the Warm Home Discount**, which currently provides a £140 annual discount on energy bills for households on Pension Credit and some lower-income working-age households. This expansion could be paid for in part through general taxation or a potential windfall tax on the fossil fuel extraction industry (see details below). The annual discount needs to be increased to offer relief following the April price rise (i.e. around £600) and expanded to a wider scope of vulnerable households – for example, offered to all Universal Credit recipients and other low-income households not currently covered.³²
- **Provide a one-off payment of £600 for everyone eligible for the Cold Weather Payment**, in addition to any payments triggered by a period of prolonged cold weather, covering the expected costs of the price hike.
- **Additional actions to reduce costs of bills**, including extending the period over which the costs of supplier failures are recouped and reducing the price cap. According to the Resolution Foundation, directly reducing the size of the price cap increase could potentially requires both legislative change and compensation for suppliers,³³ and is another avenue being explored.
- **Raise Universal Credit payments**, as an efficient and targeted means of supporting lower income households afford rising costs of living.
- **Fund emergency measures through a windfall tax on the fossil fuel extraction industry**, who are due to make significant profits due in part to the wholesale price of oil and gas. There is precedent for doing this in response to higher oil and gas prices, including in 2011 when the supplementary charge (SC) on oil gas production was increased from 20% to 32%, which was only removed when the price of oil went back below \$75/barrel – in effect from 2011 to January 2015.³⁴ There is an even more compelling case now, since the tax rate for oil and gas companies has been significantly reduced since 2011. Petroleum revenue tax is currently set to 0% when it used to be 50%, the SC has been reduced to 10% when it used to be 20%, and the huge spike in gas prices has resulted in unprecedented cash flows for a lot of oil and gas producers (see figure 3).

³² <https://www.resolutionfoundation.org/app/uploads/2021/12/Labour-Market-Outlook-Q4-2021.pdf>

³³ <https://www.resolutionfoundation.org/app/uploads/2021/12/Labour-Market-Outlook-Q4-2021.pdf>

³⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902798/Statistics_of_government_revenues_from_UK_oil_and_gas_production__July_2020_for_publication.pdf



E3G

UK company cash flow versus government share



Source: Wood Mackenzie Lens Upstream

Figure 3: North Sea upstream oil and gas companies cash flow (source: Wood Mackenzie)³⁵

What other European countries are doing

- Spain has **introduced** a €3bn (£2.58bn) windfall tax on generators and energy traders to cover the cost of investments and taxes that would otherwise have come from household energy bills.
- Germany **cut a power surcharge** levied on consumers to support renewable energy by 42.7% to help households cope with soaring energy prices. The government will help fund the cut with €3.25 billion (\$3.77 billion) in revenue collected from carbon taxes.
- The Irish government is **taking €100 off** the first electricity bill of the year to shield households from rising prices.

Long-term solutions to permanently reduce exposure to gas price hikes

The gas crisis should be a catalyst for reshaping the energy system to rebuild for long-term resilience, taking a systems-approach to understand the demand, supply and distribution measures needed to reduce bills and carbon emissions deeply and permanently. While beyond the scope of this briefing to outline in full detail; below

³⁵ <https://www.woodmac.com/reports/upstream-oil-and-gas-north-sea-upstream-5-things-to-look-for-in-2022-543643>



E3G

we outline key aspects of a longer-term response. These measures can be supported through public, private and blended finance – including by mobilising the £16bn green gilt,³⁶ and considering the role of the new UK Infrastructure Bank.³⁷

A nationwide green home retrofit programme

Increasing the energy efficiency of homes and supporting a smooth transition away from fossil gas heating is the permanent solution for lower bills and emissions. A long-term green homes infrastructure programme can deliver major benefits for households and local economies across the UK, boosting productivity and underpinning the levelling-up agenda.

Efficiency is a major factor in determining how exposed homes are to future price shocks – with figure 4 illustrating how homes in England with lower EPC ratings are more affected by energy rises – in absolute terms – than those with higher ratings.



Figure 44: The impact of energy price increases (October 2021 and April 2022) by EPC (calculated in October 2021)³⁸

E3G’s analysis from 2021 found that improving the energy efficiency of homes currently rated ‘D’ or worse for energy performance to ‘C’ would save households over £500 per year once prices rise again in April. Saving all households in homes rated D would mean an aggregate saving of £7.8bn per year – disposable income

³⁶ <https://www.gov.uk/government/news/second-uk-green-gilt-raises-further-6-billion-for-green-projects>

³⁷ <https://www.e3g.org/publications/making-markets-through-the-uk-infrastructure-bank/>

³⁸ <https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Responding-to-the-UK-gas-crisis-E3G-Briefing.pdf>



E3G

that could then be spent elsewhere in the economy, especially in local retail and services.³⁹ A sustained drive to boost home energy efficiency can support 190,000 jobs across a range of trades to 2030, and avoid pressures placed on the NHS by fuel poverty and cold, unhealthy homes – potentially preventing 10,000 excess winter deaths every year and saving the NHS £1.4 to £2 billion annually.⁴⁰ Few infrastructure projects can do so much for economic growth: with £2 put back in economy for every £1 spent on a national retrofit strategy.⁴¹

The government can focus on measures to support households with the upfront costs associated with retrofits, as well as effective and high-quality delivery.

- Fulfil the outstanding £1.6bn commitments from the Conservative Manifesto to insulate low-income homes, including through the Home Upgrade Grant (£1.4bn outstanding) and Social Housing Decarbonisation Scheme (£0.2bn outstanding). This is essential to get the UK on track to get all fuel poor homes up to EPC Band C by 2030 and end fuel poverty.
- Allocate a further £3.6 bn to set up a new grant scheme, open to all other households to insulate their home, while avoiding the flawed design process and administrative complexity that hampered previous schemes.⁴² At the moment, two-thirds of all households have no access to any financial support to insulate their homes. The pot of money available to provide grants for heat pumps should also be increased from £400m to £4.15bn until 2025 to accelerate the transition away from gas heating. In the long-term, as regulations and new initiatives like the market-based mechanism for low carbon heat are introduced, direct grant support could be structured with a tapering mechanism to control costs, rather than through an undifferentiated and time-limited funding pot on a first-come-first-served basis.⁴³ The Feed-in-Tariff and Renewable Heat Incentive offer a precedent for digression, or tapering, mechanisms.
- Consider other actions set out by the Energy Efficiency Infrastructure Group's *Better Buildings Investment Plan*⁴⁴ to spur private investment in green home retrofit measures, including the role of the UK Infrastructure Bank,⁴⁵ Green Stamp Duty⁴⁶ and 0% VAT on retrofit measures.

³⁹ <https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Responding-to-the-UK-gas-crisis-E3G-Briefing.pdf>

⁴⁰ https://www.theeig.co.uk/media/1091/eeig_report_rebuilding_for_resilience_pages_01.pdf

⁴¹ <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2021/05/Construction-Leadership-Council-National-Retrofit-Strategy-Version-2.pdf>

⁴² <https://www.nao.org.uk/report/green-homes-grant/>

⁴³ <https://www.raponline.org/knowledge-center/getting-track-net-zero-policy-package-heat-pump-mass-market-uk/>

⁴⁴ <https://www.theeig.co.uk/news/2021-budget-and-spending-review-better-buildings-investment-plan/>

⁴⁵ More detail on the role the UK Infrastructure Bank can play in supporting green homes is set out here: <https://www.e3g.org/publications/making-markets-through-the-uk-infrastructure-bank/>

⁴⁶ <https://www.ukgbc.org/news/a-housing-market-catalyst-to-drive-carbon-emission-reductions/>

-
- Support a wider suite of measures needed to underpin a nationwide retrofit drive, including a focus on green skills, public engagement, consumer advice and other measures.⁴⁷

Unleashing the full potential of the UK's renewables capacity, with a parallel focus on flexibility, connectivity and storage

The North Seas region provides excellent energy resources that could be the engine of the UK's future economic activity and ensure delivery of net zero emissions by 2050.⁴⁸ There must be a huge step-up in the production of zero carbon electricity if the UK is to decarbonise the power sector and supply growing demand from the electrification of heating, transport, and industry. The more offshore wind production that can be efficiently accessed and integrated into the power system, the easier this will be. Moreover, this would establish North Sea coastal communities at the heart of the green energy transition, providing jobs and economic activity. These new and expanded industries can help the North Sea region transition from dependence on the declining oil and gas sector and provide long-term and quality employment for workers.

Developing an integrated and interconnected electricity grid in the North Sea and northwest Europe is key to unlocking the significant wind resources, zero emissions energy sources and grid flexibility that will be needed.⁴⁹ The offshore wind target included in the Prime Minister's 10-point-plan for a green industrial revolution needs an integrated grid in order to to balance resource availability at all times and reduce price volatility at home. As well as offshore wind, there could be opportunities through supporting a diverse portfolio of homegrown UK renewables, including supporting the roll-out of domestic PV and community energy projects.

Ambitious investment in renewables must be complemented with a strategy to create a smart and flexible energy system. This will ensure a net zero energy system that is low cost and resilient. Various initiatives are underway to support this objective (e.g. energy system digitalisation strategy, National Grid ESO considering the need for electricity market reform) and these must be accelerated to ensure they do not delay the realisation of a decarbonised energy system. One key gap which must be addressed with urgency is the need for a framework to support net

⁴⁷ These have been set out here: https://www.theeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf and here: <https://electrifyheat.uk/wp-content/uploads/2021/12/Electrify-Heat-Briefing-December-2021-Training-Trust-and-Tariffs.pdf>

⁴⁸ <https://www.e3g.org/publications/offshore-wind-in-the-north-seas/>

⁴⁹ More detail can be found here: <https://www.e3g.org/publications/offshore-wind-in-the-north-seas/>



E3G

zero delivery at the local level since it is success in this area that will deliver direct benefits to energy consumers.

While there are calls from some to resolve the energy price crisis through boosting domestic production of gas, this fails to grapple with the realities of international gas markets. Gas markets are highly interconnected, with the price of gas in the UK being set according to international dynamics. Increased domestic production would not change this fact.⁵⁰ The way to reduce exposure to volatile gas markets is by reducing our demand for gas and bolstering our domestic renewables industry.⁵¹ Pursuing this course of action also capitalises on the social and economic opportunities of being a first mover in the energy transition and avoids undermining the UK's climate leadership.

UK climate diplomacy will be key to building on the high-ambition outcomes of COP26, including NDC revisions ahead of COP27. A concrete and ambitious domestic plan for driving the UK energy transition forwards would strengthen the negotiating hand of the UK in its COP26 Presidency year, providing a solid example of domestic sectoral ambition to leverage greater ambition in turn from partner governments.

Putting fairness and consumer interests at the heart of policy and investment action

As government departments and Ofgem work to tackle the causes and smooth the consequences of rising energy bills, it is essential that fairness and consumer interests are centrally considered.

- Ensure costs of short- and medium-term measures are distributed in a fair and progressive manner, recognising that proportionately, lower income households will be hardest hit by rising energy costs.
- Citizen's Advice have set out in detail how reforms to the energy market can place consumers at the heart,⁵² including through clear commitments to higher standards, stronger consumer protections and building a more resilient market, as well as clearer engagement and tailored advice.
- Public engagement and tailored household advice will be key for supporting people through the spring, signposting emergency support; as well as for providing longer-term advice on green homes measures they can take.

⁵⁰ For example, see <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/092921-highest-ever-zeebrugge-basis-leads-to-record-uk-gas-export>

⁵¹ <https://ukerc.ac.uk/publications/the-uk-s-global-gas-challenge/>

⁵² <https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Market%20Meltdown%20-%20Citizens%20Advice%20Dec%202021.pdf>



E3G

Acknowledgments

E3G would like to thank the following contributors and reviewers: Simon Skilling, Claire McConnell, Colm Britchfield, Euan Graham, Lisa Fischer, Ed Matthew

About E3G

E3G is an independent European climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

More information is available at www.e3g.org

Copyright

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 2.0 License. © E3G 2022