





# **Summary and conclusion**

The energy bill cost crisis is the result of failed policy decisions stretching back decades, and presents short-term hardship problems that are extremely difficult to address, as well fundamental problems that require long-term reform of energy policy. In the short-term government could consider, amongst other measures:

- Transfer of the cost of Contracts for Difference renewables subsidies temporarily to general taxation (a saving of £2.1 billion a year on the national electricity bill), with a view to medium-term abolition.
- Radical readjustment of the Renewables Obligation subsidy (a saving of up to £6.6 billion a year on the national electricity bill), with a view to medium-term abolition.
- A VAT holiday on gas and electricity, and also, for consistency, on heating oil. A modest but worthwhile saving of 5% on the bill.
- Special grants to pensioners, adding to the Winter Fuel Payment, and increasing its catchment to include all pensioners.

These measures would provide direct relief to households, and also to industrial and commercial consumers.

Government could consider offsetting any costs arising from these measures by delaying the overseas climate aid packages – some £12 billion in total over the next five years. There is a strong argument for suggesting that the British people cannot afford this gesture at present.

In the medium and longer term the UK could resume fracking, could remove obstacles to the replacement of older combinecycle gas turbines, could accelerate the introduction of small modular nuclear reactors for both electricity and industrial heat, could wind down and phase out all the renewables subsidies, and should ensure that the renewables fleet is compelled to pay for its own system management costs and grid expansion.





# Background: the causes of the present crisis

The current crisis is the result of several interwoven policy failures that have rendered the UK electricity system fragile and vulnerable to shock, with British energy policy since 2002 focused on the development of renewable energy, particularly wind and solar electricity, almost to the exclusion of all other concerns.

Income support subsidies to renewables now amount to over £10 billion a year, and rising. This is drawn from consumer bills, with approximately one third of that sum hitting households directly, and the rest increasing the costs of goods and services as industrial and commercial consumers pass on their share of the subsidy costs. VAT of 5% is charged to consumers on these subsidy costs.

Coal stations have closed, nuclear is winding down, and the combined-cycle gas turbines that guarantee security of supply have been offered a smaller and very irregular market from which to recover their fuel and, most importantly, their fixed costs.

System balancing costs in the UK have risen dramatically since the introduction of renewables, from about £350 million a year in 2002 to over £2 billion a year at present, mostly due to the presence of uncontrollable renewables.

Transmission system costs have also risen significantly, from about £2 billion a few years back to about £3 billion a year at present, again largely due to the presence of renewable generators.

Many European states have taken a similar path, meaning not only that electricity costs to consumers have already risen to very high levels, but also that consumers are critically exposed to the cost of natural gas, since this is required to guarantee security of supply. This has created the conditions for the emergence of the current crisis. At times of low wind, and 2021 was a very low wind year, gas demand can rise significantly throughout Europe. Other international factors have compounded this difficulty and resulted in very high gas prices to European and UK consumers. Electricity generation costs and also balancing costs have consequently risen sharply.

The widely-held belief that renewable energy would protect consumers against gas-price spikes has been proved false; in point of fact, as many sceptical analysts have long argued, it makes the problem worse.

Furthermore, and critically, the high annual cost of subsidies to renewables have consumed any headroom in domestic energy budgets that might have buffered households against the current price spike.

Gas production in the UK's continental shelf, and domestic gas production elsewhere, has been falling sharply since the year 2000. Green lobbyists have successfully prevented the offsetting development of shale gas production, which has been so successful in the United States.

These high regional gas prices have been particularly problematic for the United Kingdom since it was one of the first European states to move domestic hot water and space heating to natural gas, with

nearly all the UK's 26 million households using this fuel.

The impact of current high gas prices on the electricity market is exacerbated by a decade of prorenewables policies that have discouraged the replacement of older combined-cycle gas turbines with newer ones that are much more fuel efficient. The consequence is a perverse combination of higher than necessary electricity prices and carbon emissions.

Finally, the UK government under Theresa May unwisely applied a price cap to domestic bills. As a result, smaller supply companies that were insufficiently capitalised to hedge forwards have been unable either to absorb or to pass on the rising costs and have failed, further increasing costs to all consumers.

While the immediate political issue is the direct impact of high energy prices on domestic customers, it is important to remember that nearly two-thirds of UK final energy consumption is accounted for by commerce, industry, other services, and the public sector. High energy prices are a central element in accelerating inflation. They will squeeze both employment and investment in the longer term. Noone should forget their wider economic effects in the 1970s and early 1980s.

What are the Government's options?

### 1. A VAT holiday for domestic energy

VAT, as noted above, is charged at 5% on the supply of electricity and gas to households, magnifying the cost of subsidies to renewables, system balancing costs, and also the rising price of natural gas. Since so much of the VAT take is actually comprised of a tax on a tax (green levies in this case) there is a case for zero rating, or at least a significant rate reduction, in the current circumstances.

The Prime Minister's suggestion that this would benefit the well-off is arguably misleading. Energy levies and taxes are regressive, since energy costs form a larger part of expenditure in a low-income household than in a high-income one. A VAT cut would indeed benefit high-income households, but it would benefit low-income households much more. In any case, in an emergency, perfect equity may not be attainable; the point is to help those in trouble.

It should be noted that applying a VAT break in Northern Ireland would probably be regarded as fatal break of the Protocol, and might face other obstacles due to the existence of the Single Electricity Market. Special arrangements for Northern Ireland would be necessary.

However, it should be noted that the impact of the VAT holiday, though worthwhile, would not address more than a fraction of the likely increase in domestic bills, and it would have no impact on supplies to industrial and commercial consumers.

The suggestion currently proposed by the Labour Party that a VAT cut should be funded through a windfall tax on North Sea oil and gas production would appear to be extremely unwise and bad value. The fiscal regime in the North Sea is already deeply hostile, and has

contributed to the sharp decline in output from the year 2000, as noted above. The exercise of arbitrary taxation of this type would make inward investment in the energy sector, for example in the development of shale gas, extremely difficult to secure, and thus in the longer term a windfall tax on domestic oil and gas production would only embed the current problems as a chronic and a permanent feature of British economic life.

### 2. Loans for energy suppliers

It has been rumoured that the government is considering providing £20 billion of support to energy suppliers via bank loans, so that the immediate costs of supplying gas and electricity need not be passed on to consumers. This would provide short-term relief, preventing the number of defaulting billpayers reaching critical levels, but it is likely to be inefficient, and would also possibly fall foul of international commitments to reduce subsidies on the consumption of fossil fuels. Taxpayer support to low-income consumers, for example via low prices of gas in Iran and transport fuel in South America, is widely criticised by climate activists as constituting a subsidy to the fossil fuel industry. The Conservative Environment Network (CEN) has already condemned the proposed VAT cut as a "subsidy to fossil fuels"; the loans to energy companies could well be interpreted in the same way. It is perhaps unlikely that Greenpeace or similar bodies would challenge the £20 billion as a subsidy incompatible with the Climate Change Act, but it is a possibility, and in any case the spectacle of having to subsidise consumers in this way would put the United Kingdom into an embarrassing international class of economies.

Moreover, it would be difficult to ensure that the loans – or the deferral of tax or levy payments if that were the route chosen – were recovered. While this can be done in principle, one wonders whether any government would be able to do it in practice?

We therefore think that these loans would in effect be gifts, and would set a shackling precedent for bailouts to the energy sector. They would also be perceived by the public, to a degree correctly, as gifts to energy company fat-cats, and would therefore be extremely unpopular.

#### 3. Direct support to households

As noted above, subsidising prices indirectly through "loans" to energy companies is likely to be both inefficient and unpopular. The Treasury could therefore, and in spite of the many difficulties involved, consider a mixture of special direct assistance to household consumers via the tax, pension and benefit systems. Specifically, they could look at:

- Making special grants to pensioners: adding to the Winter Fuel Payment, and increasing its catchment to include all pensioners. This could be introduced immediately.
- Making a special one-off grant to low-income and other spe-

cial needs households already identified in the benefits system. This could be introduced immediately.

- Raising the tax threshold for standard tax-rate payers but reduce the rate for higher taxpayers to offer targeted support.
- Introducing major tax reductions, accompanied by public spending cuts across the board, to ease all household and business budgets.

Many will consider that there is a strong moral case for direct assistance to those households on low and fixed incomes, since the current crisis is largely the result of state policy. However, further increases in public spending are in themselves highly controversial and may not be affordable for the taxpayers onto whom the burden would be transferred.

Major tax reform to ease pressure on consumer budgets would require immense courage in the Treasury, and would have to be accompanied by significant cuts in public spending. However, providing £20 billion of support in this way would certainly be more popular than bailing out energy companies. It is also hard to see how it could be challenged in the courts by environmentalists, and it would avoid setting a long-term precedent of support and price fixing in the energy sector.

## 4. Suspend the green levies subsidising renewables

Consumers have to carry considerable costs as a result of the deployment of renewables. Direct subsidies – via the Renewables Obligation, the Feed-in Tariff and the Contracts for Difference systems – run to £10 billion a year, but there is a further £2 billion from the high system costs renewables bring to the grid. Government could consider suspending the levies on consumers that fund the subsidies, providing relief to household and businesses directly, through their energy bills, and indirectly through reduced pressure on the general cost of living.

Realistically, however, adjustments to the Feed-in Tariff for small-scale generators (currently costing consumers £1.5 billion a year), are too complex and politically controversial for implementation.

The Renewables Obligation (£6.6 billion a year) and the Contracts for Difference (£2.2 billion a year), on the other hands, are fundamental causes of the current crisis and thus prime targets for reform.

In the short-term, the Treasury could consider paying for these subsidies from general taxation. In the medium-term, they should work to buy both these subsidy entitlements back at a discount, and cease to provide subsidy in any form. This is probably the only option for the Contracts for Difference entitlements, since these are legally guaranteed entitlements to a fixed price. However, there are other options for the Renewables Obligation. For example, the Obligation on suppliers could be cut by 50%. If government wished to be generous to RO-registered generators it could convert the buyout price to

a buyout and buyback price, but at a much lower value – say 50% of the 2021–2022 price in 2022–2023. Producers would protest, but they would be on weak ground. Generators are likely, and in spite of the Power Purchase Agreements, to be benefitting from the currently very high wholesale prices. It is clearly wrong that they should be in the position of receiving a high level of subsidy on top of market prices that are very much higher than were expected when the scheme was introduced. This excess support, where it exists, is unjustifiable.

Government is in a strong position, and can point out that the value of a ROC was never guaranteed and was initially intended to fall if the Obligation was met, so as to protect consumers from undue expense.

Furthermore, the scheme has been closed for nearly five years and the decision cannot affect the UK's future climate change obligations.

In the longer term, the Government will have to consider terminating all energy subsidies that increase costs to consumers.

# 5. Prevent further increases in electricity system costs

The presence of wind and solar is a large part of the reason that system balancing and transmission costs have risen so much over the last decade. Government should act immediately to a) ensure that the costs of intermittency are charged to wind and solar generators, and b) that no further expensive grid expansions, such as the Western Link and the now proposed Eastern Link, are permitted. Consumers cannot afford them. However, while this is a necessary and important reform, it is a medium-term rather than a short-term remedy.

## 6. Encourage hydraulic fracturing for shale gas

The government should restart the process of fracking for shale gas, acting promptly to lift the unduly restrictive regulations. However, this would not provide immediate relief to consumers. As with nuclear generation, both for high-grade heat and for electricity, fracking for natural gas is now a medium-term policy. It is essential but it will not address the current acute crisis.



