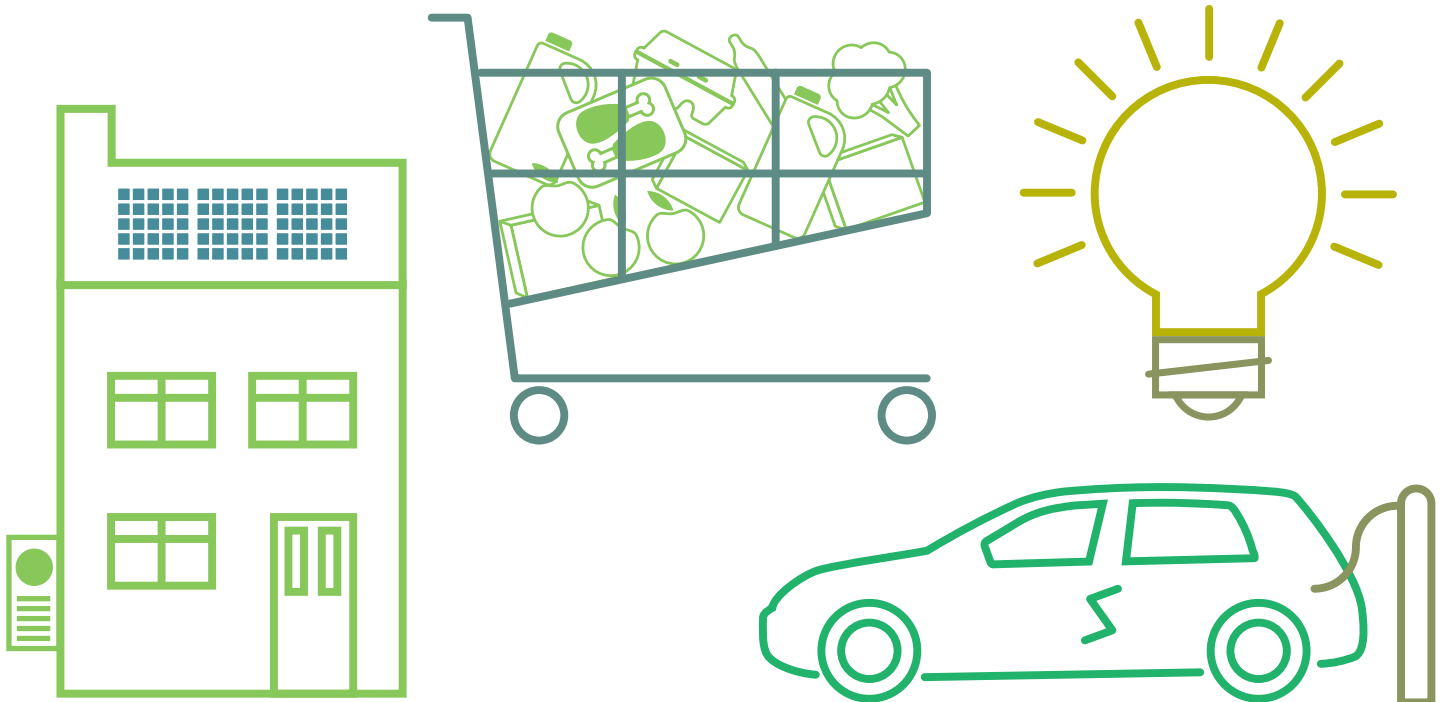


Cutting the cost of living with a green economy

 green
alliance...



“

The more clean, cheap and secure power we generate at home, the less exposed we will be to expensive gas prices set by international markets.”

Kwasi Kwarteng, secretary of state for business energy and industrial strategy¹

Introduction

UK inflation is at a 30 year high.² The price of gas was four times higher in January 2022 than a year earlier.³ The 54 per cent increase in the Ofgem energy price cap on 1 April 2022 will mean the typical household energy bill will go up by £639, reaching £1,971 a year.⁴ And the cap is expected to rise again later in 2022.

Petrol and diesel prices have reached record highs due to volatile international markets.⁵ Inflation is going to affect the price of other goods and services, putting further pressure on household budgets.

According to the Office for National Statistics, the Consumer Price Index for food and non-alcoholic drinks has increased 4.3 per cent since January 2021, the fastest rate since September 2013.^{6,7}

Despite these pressures, public demand for climate action is holding strong, and for good reason. In January 2022, an opinion poll found

that 54 per cent agreed that the UK cannot afford not to implement policies intended to address climate change, compared to 29 per cent who said we cannot afford to implement such policies in the current economic climate.⁸

Necessary action to meet the UK's net zero carbon goal will help to solve problems contributing to the current cost of living crisis, whether through greater efficiencies, cutting demand for fossil fuels or cheaper energy alternatives.

The government has a vital role to play in ensuring that benefits are maximised and distributed fairly, while costs are minimised, especially for households with low incomes which are affected most by the rising cost of living.

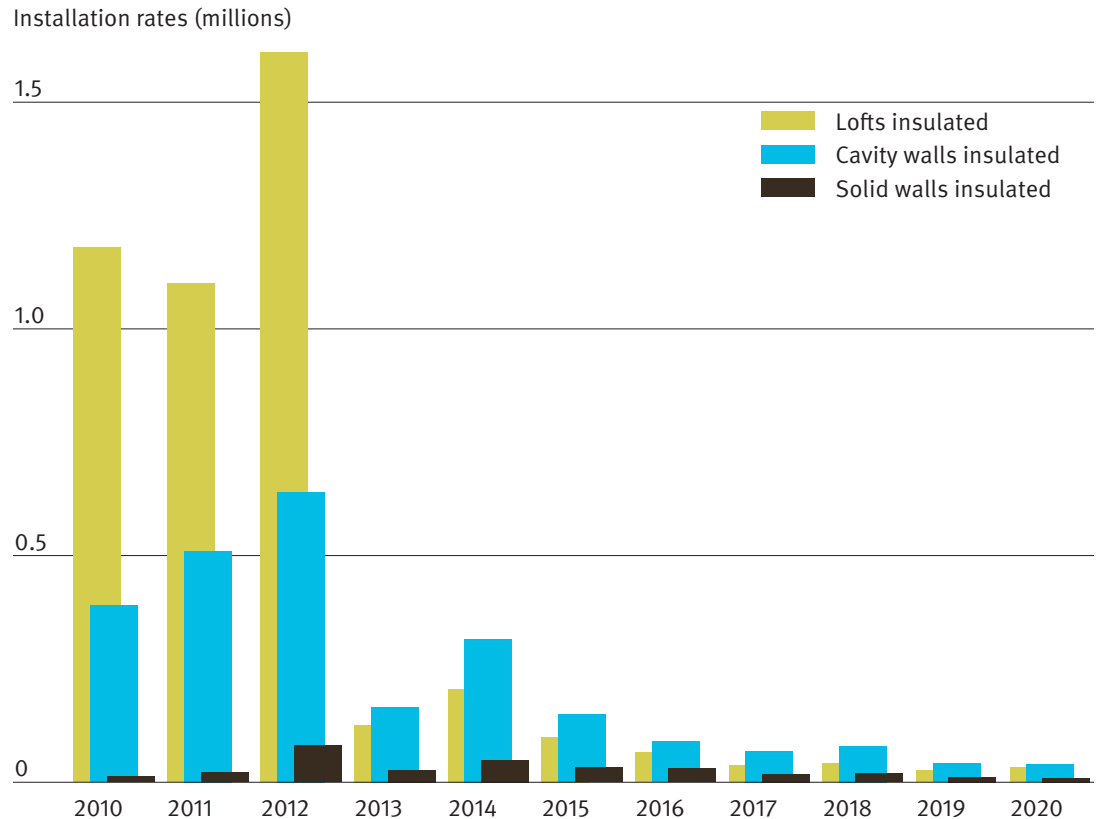
Here, we outline how policies that protect against climate change will also help to reduce the cost of living, both now and in the future.

Holding back climate action will raise the cost of living even higher

Cuts to energy efficiency subsidies and scrapping the Zero Carbon Homes policy in the past decade mean millions of homes are less insulated than they could be against price rises.

Installation rates dropped from 2.3 million in 2012 to an annual average of just 230,000 since 2013. Raising the energy efficiency of UK homes is crucial to keeping bills down. Upgrading homes to energy performance certificate (EPC) band C, the government's ambition for 2035, can lower a home's gas use by 20 per cent.⁹

Energy efficiency installations plummeted over a decade ago after the government withdrew support¹⁰



Energy efficiency protects those on low incomes from high energy bills...

As a proportion of income, the poorest households spend three times more on fuel bills than those on high incomes.¹¹

Those most exposed to soaring energy prices are also living in the least efficient homes, ie those with EPC D rating or worse. New analysis shows that raising the 15.3 million least efficient homes, rated EPC D or worse, to EPC C would save each household £511 per year after the April 2022 price cap rise, an aggregate saving across the country of £7.8 billion per year.¹²

Improving home energy efficiency has a big impact on energy bills



...and there is recent proof it works

Better insulation, heat pumps and solar panels recently helped some low income households with the worst thermal efficiency jointly save £1.2 million in the first year of the Local Authority Delivery scheme of the Green Homes Grant. This provided £200 million to 136 local authorities, offering £5,000 and £10,000 grants for energy saving installations. Phase one, launched in August 2020, had installed 11,538 measures in 9,110 households by the end of November 2021.¹³

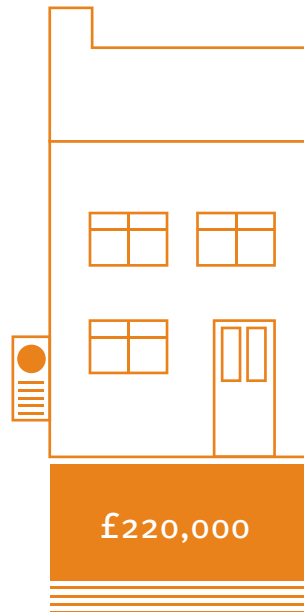
The Local Authority Delivery scheme led to big savings in its first year

Total annual bill savings under the scheme from three energy efficiency measures

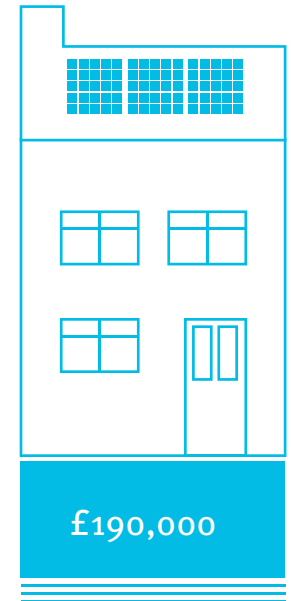
Solid wall insulation



Heat pumps



Solar



“

The only long term solution is to reduce our gas dependency. More than 80 per cent of the UK public has an individual gas boiler, and that has to change, as does making our homes more energy efficient with a power system that is driven much more by low carbon electricity generation.”

Emma Pinchbeck, chief executive, Energy UK¹⁴

“

Looking into the long term, the real way for the country to get out of the volatility we've seen is to diversify our energy sources and push harder on getting towards our net zero target.”

Jonathan Brearley, CEO, Ofgem¹⁵

Better products keep costs down

Ecodesign requirements, along with longer term warranties and software support, help to keep valuable products like electricals in use by making them easier and cheaper to repair. People are not forced to buy replacements, saving money while cutting electrical waste and carbon emissions.

Ecodesign standards also save the average UK household at least £100 on their annual energy bill.¹⁶ Energy efficiency improvements, introduced by the government in July 2021, including phasing out halogen light bulbs and a sales ban on lighting with fixed bulbs, will also cut energy use.¹⁷ There is scope to go further and faster, both in the range of products covered and with a more comprehensive right to repair.¹⁸

Product standards save money and carbon¹⁹

New lighting product standards will save British consumers an average of £75 a year on their energy bills...



...and will avoid 1.26 million tonnes of CO₂ emissions a year



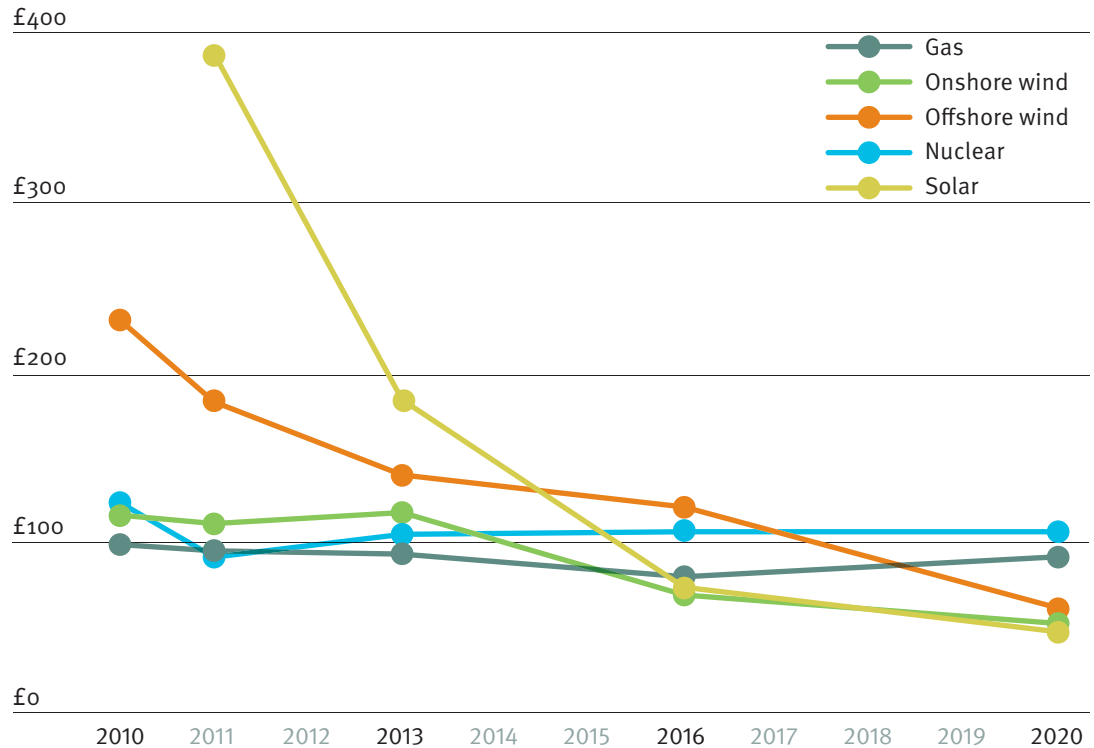
Switching to renewables pays off

Renewable energy, like wind and solar, is the cheapest form of electricity. As deployment increases it limits electricity price rises by reducing the need for more expensive gas. In 2020, renewables were responsible for 42 per cent of UK power generation.²⁰

Renewables contracts also involve refunds to suppliers that should be passed onto consumers. Ofgem estimates that, in 2021-22, these refunds saved £15-20 per household.²¹ The Low Carbon Contracts Company forecasts these paybacks could increase to £770 million (equivalent to £27 a year per household) by the end of 2022, as energy bills rise.²²

Renewable energy costs have fallen steeply since 2010²³

Cost of energy



Electric vehicles are cheaper to run

While the upfront cost of electric vehicles is currently higher, their running costs are significantly lower than conventional petrol and diesel vehicles. Data from 2021 shows that, over four years, a new battery electric vehicle would save up to £4,000 in running costs compared to a petrol engine vehicle.²⁴

This is especially significant for used cars. On a total cost of ownership basis, the owner of a second hand electric vehicle could save between £700 to £2,300 compared to a diesel or petrol equivalent. Savings are even higher for third hand vehicles, with lower costs estimated at between £3,500 and £5,600, compared to a similar diesel or petrol model.²⁵

This would benefit drivers on low incomes, who are more likely to drive used cars.

Second and third hand electric vehicles save owners even more than petrol and diesel models²⁶

Second owner: cost over five years



£18,919



£17,371



£16,634

Third owner: cost over seven years



£21,561



£19,398



£15,919

Petrol

Diesel

Battery electric

Cutting food waste cuts food bills

UK households produce 4.5 million tonnes of avoidable food waste every year, worth £14 billion in total (£700 for an average family with children).²⁷ This doesn't just cost money: lost or wasted food contributes between eight and ten per cent of global greenhouse gas emissions.²⁸

A huge quantity of edible food is also wasted in retail, manufacturing, hospitality and farms. In 2020, 92,000 tonnes of surplus food, worth £280 million, was redistributed with the support of emergency Covid-19 measures. This was equivalent to 220 million meals saved from waste to help those in need.²⁹

The average family with children throws away £700 worth of food each year



How the government can cut the cost of living now

Invest more in energy efficiency, eg by supporting successful schemes, such as the Local Authority Delivery Scheme, to install more insulation, solar and electric heat pumps.

Bring the VAT on home energy efficiency renovation and low carbon installations in line with zero rate VAT on new builds.

Cut VAT to zero on product repairs.

Encourage food retailers, caterers and manufacturers to redistribute unsold food, in partnership with charities.

Reinstate the Emergency Surplus Food Grant for England at a similar level to 2020, to assist those suffering food poverty.

Expand 'right to repair' to more products and ensure consumers and third sector repairers can access spare parts and repair manuals quickly and cheaply.

Cut VAT on energy used at public electric vehicle charging points, from 20 per cent to five per cent, which is applied to private charging points, to help electric vehicle owners without off-street parking.

How the government can help to keep the cost of living down in future

Regulate for a minimum energy efficiency standard of EPC C or above by 2030 for all homes, at the point of sale.

Bring the Future Homes Standard forward to 2023, at the latest, to stop the sale of new homes that will need expensive retrofits for energy efficiency in future.

Set an ambitious Zero Emission Vehicle (ZEV) mandate sales target in 2022 to boost the number of second and third hand electric vehicles on the market.

Create a £400 million Circular Economy Innovation Fund to help businesses develop more products that last and save energy.

Produce a Clean Power Plan to decarbonise the energy sector by 2035.

Remove planning barriers to onshore wind deployment.

Set an ambitious target to have 15GW of floating offshore wind by 2035.

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“

Energy costs are eating into budgets and it's families on the lowest incomes who're feeling the biggest squeeze. With further hikes set to push bills to a generational high, disaster is on the horizon if the government doesn't act.”

Dame Clare Moriarty, CEO, Citizens Advice³⁰

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Green Alliance

Green Alliance is an independent think tank and charity focused on ambitious leadership for the environment. Since 1979, we have been working with the most influential leaders in business, NGOs and politics to accelerate political action and create transformative policy for a green and prosperous UK.

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