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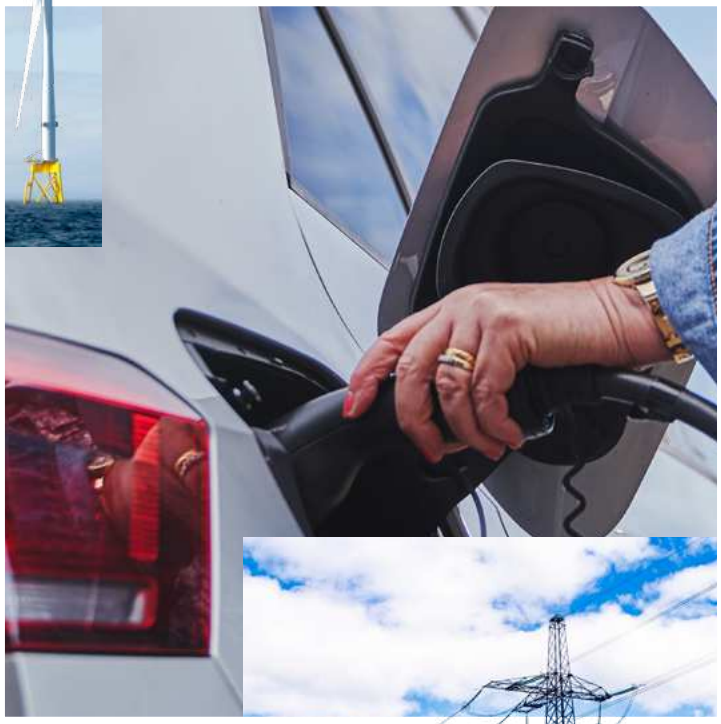


Powering secure, affordable energy

A clear pathway to sustainably lower bills

Foreword

For most people, energy only really comes into focus when the bill arrives. And in recent years, those bills have been anything but predictable. As we set out in this report, around 70% of the rise in domestic energy bills since 2017 has been driven by global commodity prices and inflation. With gas playing such a central role, the UK is exposed to shocks beyond its control - and those shocks feed straight through to what people pay.

But there is a way to change that. By investing in more homegrown, low-cost electricity sources - like offshore wind, solar and hydro - we can become less dependent on gas, which is often the most expensive and certainly the most volatile part of the system. As we set out clearly in these pages, over time this will bring down energy costs and, more importantly, make them more stable and less exposed to global price swings.

And the story doesn't end there. Electrification — switching how we use energy, from petrol cars and gas boilers to electric vehicles and heat pumps – can help bring bills down even more. We already expect clean power infrastructure to cut costs from the early 2030s. If we electrify faster, supported by proactive network investment, they fall even more swiftly.

For example, moving to an electric vehicle could cut overall energy costs for a family by around 30%, with a further 5% saving from switching to a heat pump. The gains are tangible and significant: a shift to electrification could lower an average household bill by around £500 by 2040, and by around £1,000 by 2050 annually. And that's despite policy costs and levies currently making electricity artificially expensive relative to gas – address this and the savings become even greater.

What matters most is that people feel the benefit. With the right investment and a fair approach to policy costs and the transition overall, so people aren't penalised for choosing electricity, we can make energy clean, affordable and available for all.

There is a clear case for maintaining and refining targeted support, and for going further – by looking again at how policy and network costs are allocated across the system. Extending targeted support to SMEs, ensuring policies such as the Climate Change Levy encourages electrification and reviewing how policy costs are shared, would all help too.

For too long, the UK has lived with energy bills shaped by global gas prices it cannot control. The pathway is clear: invest in homegrown energy; build a bigger, smarter and more flexible grid; accelerate electrification. Do that and our data shows that we will achieve what everyone – regardless of their political persuasion – aspires to: true energy security and protection from global shocks, cheaper and fairer energy bills and a thriving, competitive economy.

Martin Pibworth
Chief Executive, SSE

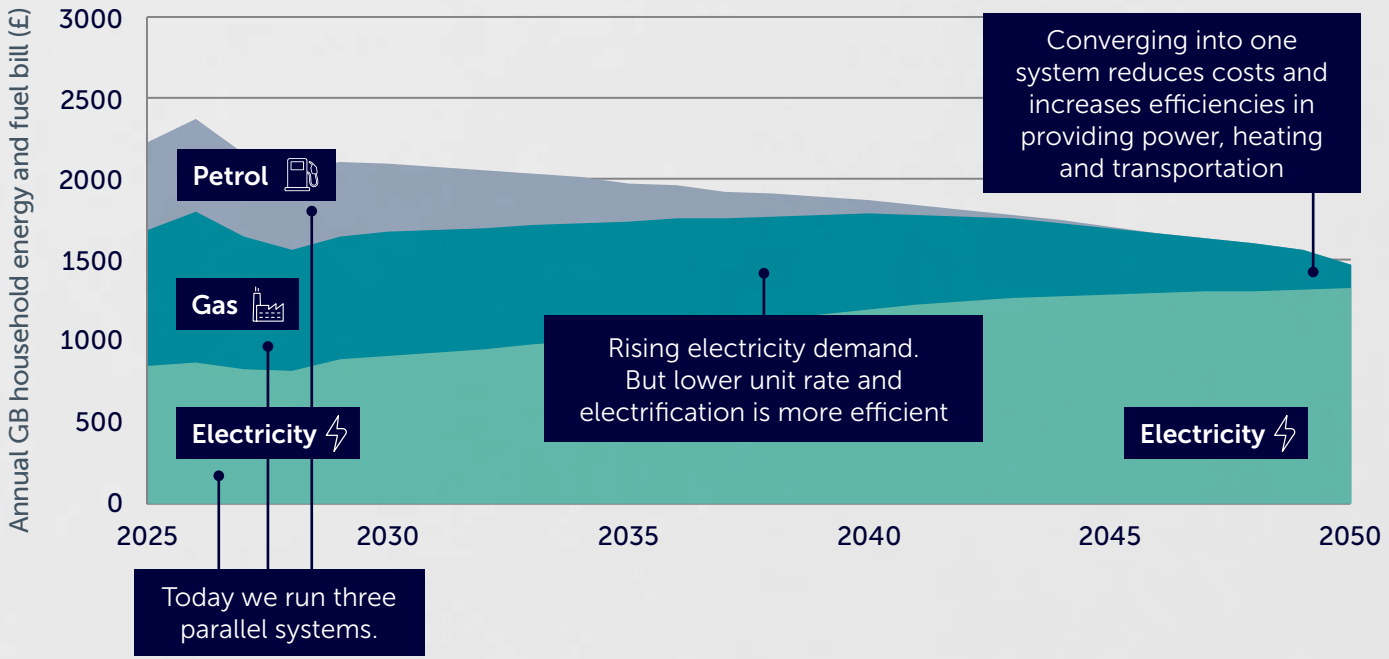
How can the UK achieve sustainably lower energy bills?

This question goes to the heart of the debate around energy policy not just in the UK but globally. In this report, we show that after a period of higher prices driven by fossil fuels, the UK is on the right path to achieving lower, and more stable, energy bills for the long term. And that public support for this transition is stronger and more consistent than is often suggested.

Delivering sustainably lower bills for customers requires three key steps

- Deliver homegrown energy infrastructure
- Drive electrification across the economy
- Ensure the transition is fair and leaves no-one behind

Homegrown energy plus electrification cuts household bills



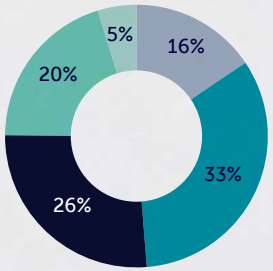
Stepping back: what really makes up an energy bill?

Electricity and gas bills don't just cover the cost of energy itself. They also pay for the networks that deliver it, supplier overheads and government schemes that support renewables and vulnerable households.

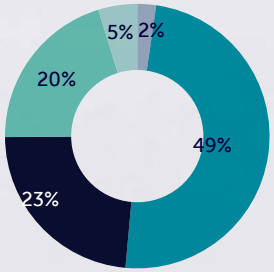
Breakdown of GB average domestic dual fuel bills (£/household)

Retail Costs | Network Costs | Wholesale Costs | Policy Costs | VAT

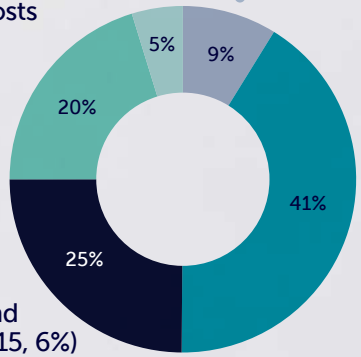
£914 Electricity



£948 Gas



£1,862 Dual Fuel



Retail Costs

- Supplier operating costs (e.g.billing)
- Reasonable debt-related costs
- Industry body costs (e.g. Xoserve, Elexon)
- Supplier profit

Network Costs

Electricity (13%)

- Transmission (~£90, 5%) and Distribution networks (~£115, 6%)
- Balancing the system (~£40, 2%)

Gas (12%)

- Gas transmission and distribution networks (~£220, 12%)

Policy Costs

- Low carbon generation support (e.g. Nuclear Regulated Asset Base, CfD)
- Security of supply (Capacity Mechanism)
- Government social policies (e.g. Warm Home Discount, Feed-in Tariffs.)
- Support from UK Government has removed 75% of RO scheme cost

Wholesale Costs

- Purchase of energy from wholesale markets

Based on a typical household consumer, as defined by Ofgem's TDCVs, as of June 2026

Source: SSE

The public wants energy security, and backs homegrown energy to deliver it

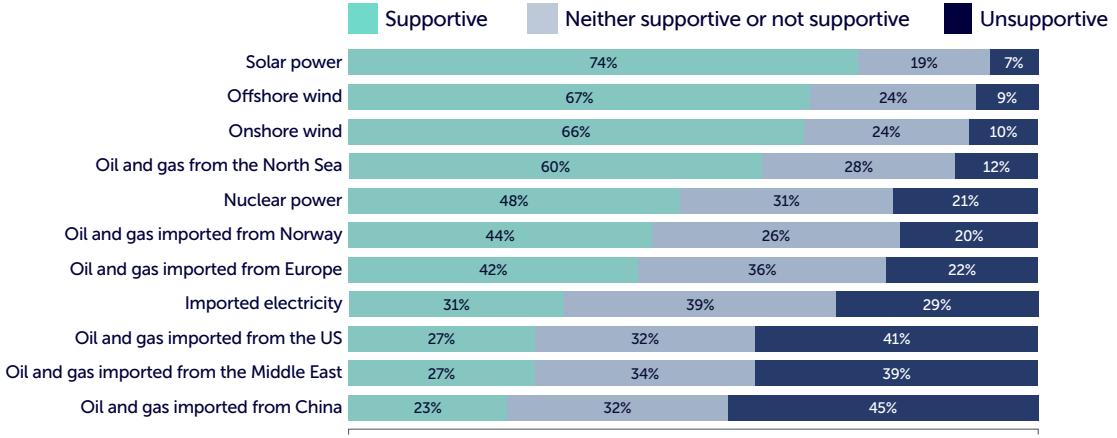
To complement the analysis in this report, we commissioned new, nationally representative polling to understand how the public views energy affordability and the choices facing the UK's energy system.

The findings show that cost of living, and energy bills in particular, remain a major concern for voters, and provide important context for the report's conclusions. The polling highlights how public attitudes align with a shift towards a more domestic, electrified energy system focused on delivering more stable and affordable bills.

- **Voters already see global factors as the main driver of rising bills**
  Global conflicts are the most cited cause (44%), reinforcing that affordability is closely linked to exposure to international energy markets.
- **There is strong, cross-party support for domestic energy production**
  Large majorities across all political groups say it is important that the UK produces more of its own energy, reflecting concern about reliance on other countries.
- **Energy security is understood primarily in terms of affordability**
  Voters define "energy security" in practical terms—keeping bills stable and ensuring reliable supply—rather than system-level concepts.
- **Renewables are more strongly associated with lower energy bills than North Sea drilling**
  More voters support investment in renewables than North Sea drilling (58% vs 45%), and when asked which is more likely to bring down consumer energy costs, are more likely to select renewables over oil and gas production.
- **This is not a binary debate**
  A majority of those who support North Sea drilling also support renewables (62%), indicating broad overlap and a pragmatic, rather than ideological, public view.

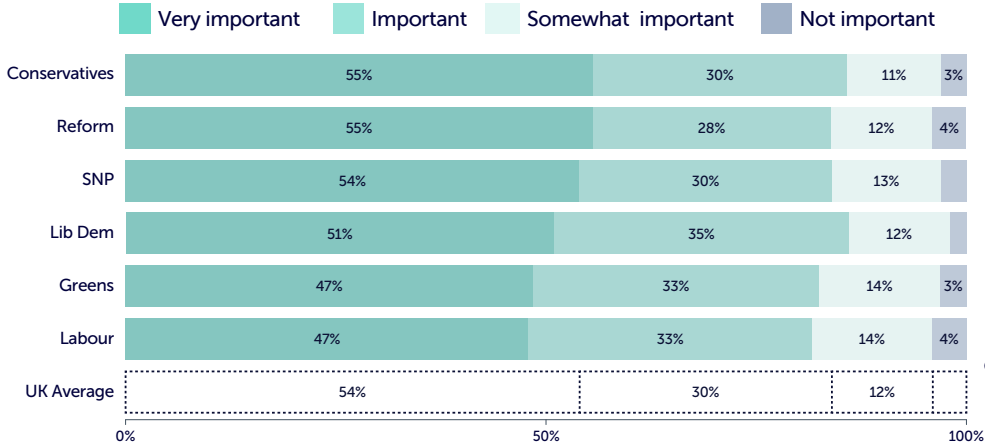
Voters support increasing solar (74%) and wind (67%) more than other forms of energy

How do you feel about increasing the following types of energy in the UK?



Voters are united in their support for domestic energy production

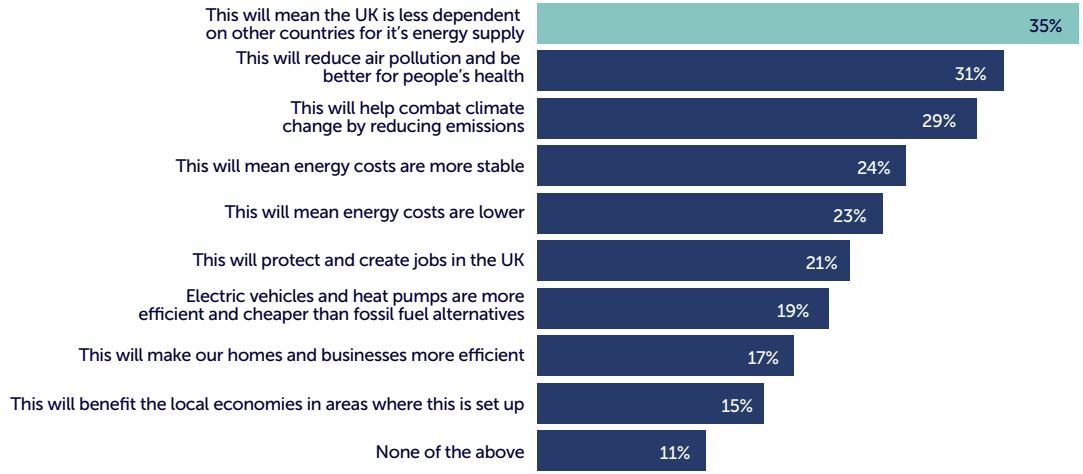
How important is it that the UK can produce its own energy without relying too much on other countries?



Source: SHGH, Online nationally representative survey (GB), 11 to 15 June, n=2013

Voters support the shift to electrification

Which of the following do you see as the main advantages of moving towards electrification?



Source: SHGH, Online nationally representative survey (GB), 11 to 15 June, n=2013

- **Electrification is most strongly associated with reducing reliance on other countries**
  The most commonly cited benefit is making the UK less dependent on other countries for it's energy supply (35%), aligning closely with concerns about energy security.
- **Voters link electrification directly to more stable and affordable energy**
  Around a quarter of respondents say electrification would lead to more stable energy costs (24%) and lower overall costs (23%)
- **The case for electrification is driven by practical outcomes, not ideology**
  Voters associate electrification with tangible benefits including improved health and air quality (31%), tackling emissions (29%), and supporting UK jobs (21%), rather than abstract system concepts.
- **Cost stability and reducing dependence are the most persuasive drivers of change**
  When asked to weigh different energy choices, voters consistently prioritise options that reduce exposure to global markets and help keep costs stable, reinforcing the importance of shifting away from fossil fuel reliance.

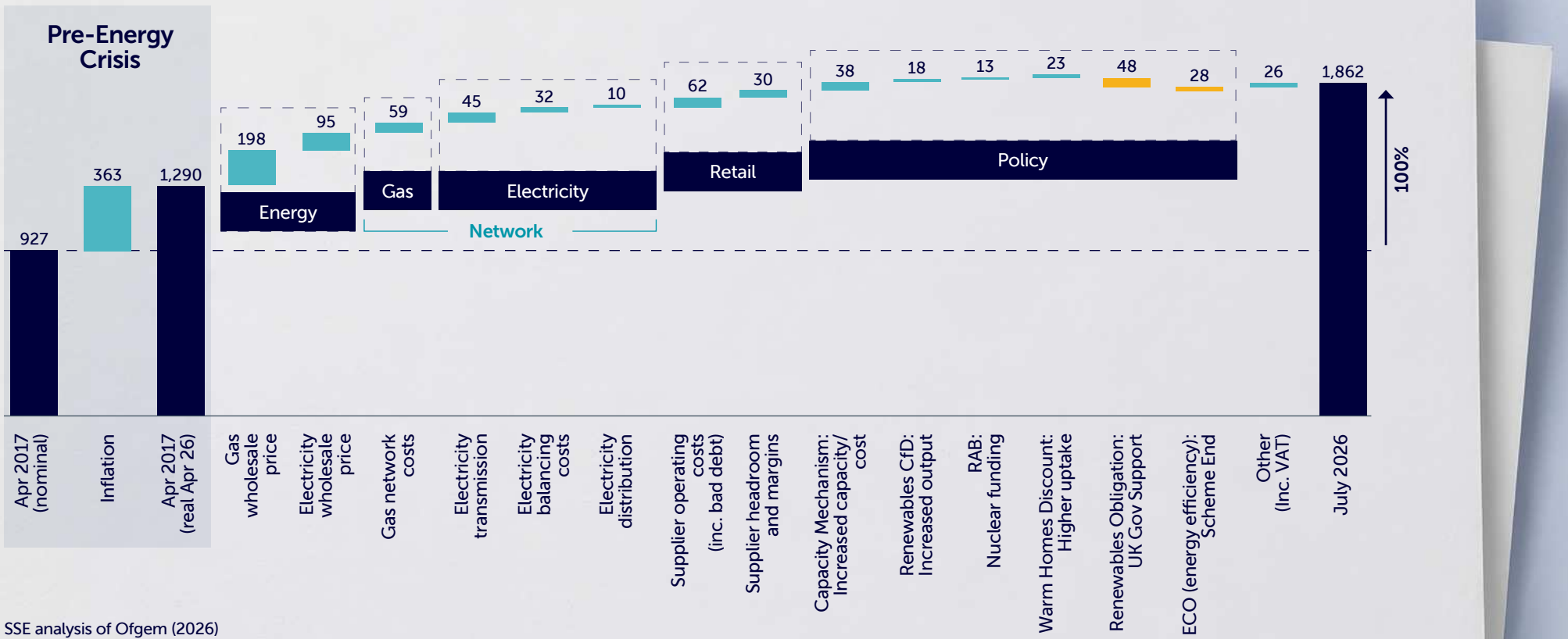
Fossil fuel costs and inflation have driven recent bill increases

Domestic energy costs have doubled since 2017, with around 70% of that increase driven by inflation and rising commodity costs.

The UK's reliance on imported gas leaves households and businesses exposed to global events and conflicts. Following Russia's invasion of Ukraine, energy bills surged to unaffordable levels, with British taxpayers funding a £44bn support package (NAO, 2024). More recently, conflict in Iran and the Gulf states have pushed up the price cap, with gas rising by 28% and electricity by 6% from 1 July 2026.

Fossil fuels such as gas will continue to play an important role during the energy transition. But the UK and Europe remain tied to global gas markets, where prices are set by international trade. When supply is disrupted, gas is sold to whichever country can pay the most — leaving UK households and businesses exposed to sudden price spikes.

Apr 2017- July 2026: Movement in GB average domestic fuel bills (£/household)



SSE analysis of Ofgem (2026)

Energy bills outlook

Lower wholesale costs should offset network cost increases in the near term, keeping bills broadly flat, though this, of course, remains subject to global events.

As the UK moves towards more homegrown energy, bills will become less exposed to the day-to-day swings of global gas prices. Instead, more of the costs will be known upfront, driven by investment in things like grids and renewable generation. This means there will be less exposure to the day-to-day swings of global fuel prices.

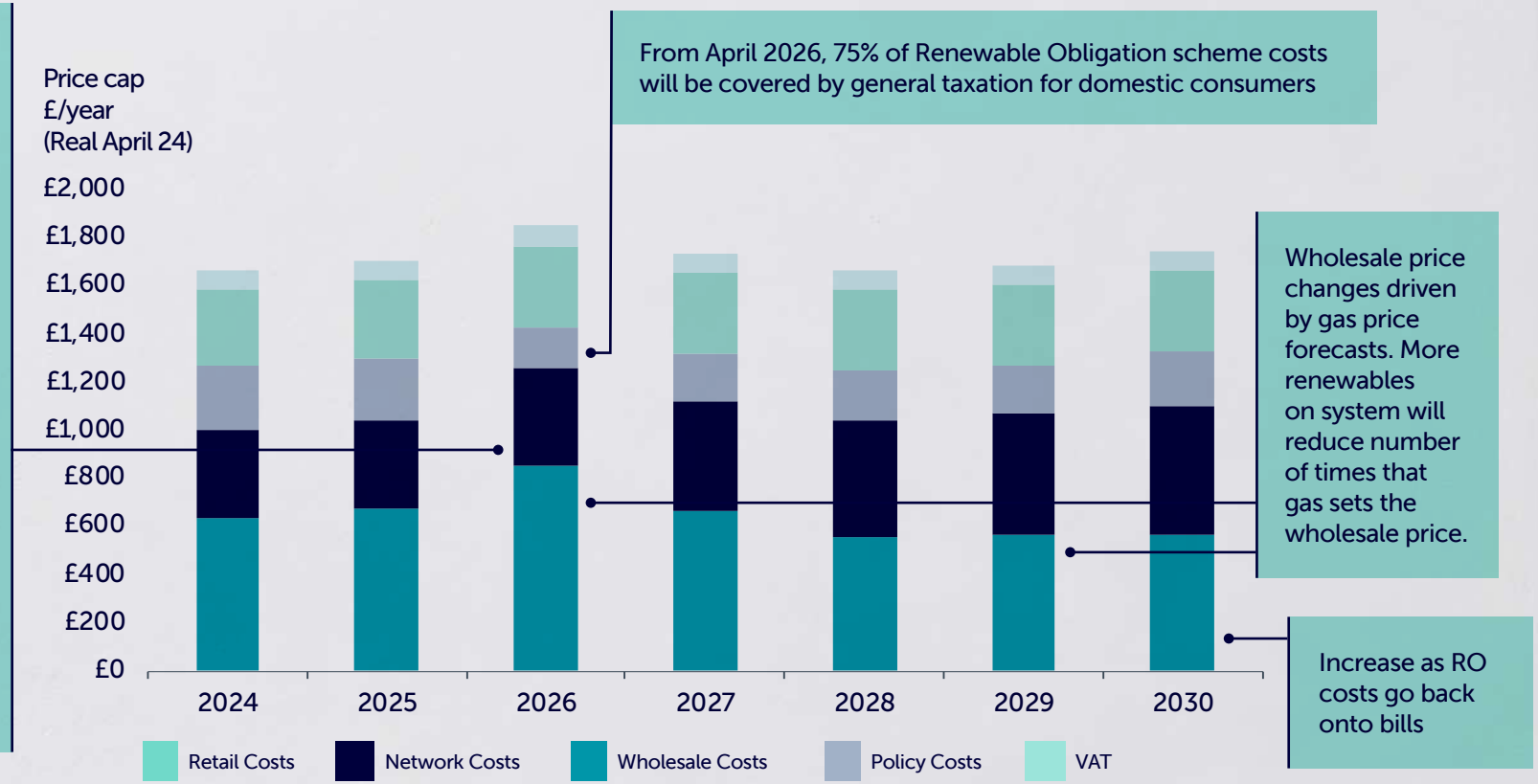
While this requires investment, it helps protect households and businesses from sudden price spikes and makes bills more stable and predictable over time. Many households also pay for energy in the form of petrol and diesel, which is similarly exposed to volatile global markets,

Dual fuel outlook to 2030

Network costs (regulated by Ofgem under a price control) will increase over the next price control period to pay for investment in the network.

Ofgem has approved a "smooth transition to higher charges".

Investments in electricity networks are necessary to enable more homegrown energy to connect to the grid, and for greater use of electricity across the economy — both of which lead to lower bills in the future.



From April 2026, 75% of Renewable Obligation scheme costs will be covered by general taxation for domestic consumers

Wholesale price changes driven by gas price forecasts. More renewables on system will reduce number of times that gas sets the wholesale price.

Increase as RO costs go back onto bills

Homegrown energy offers bill protection

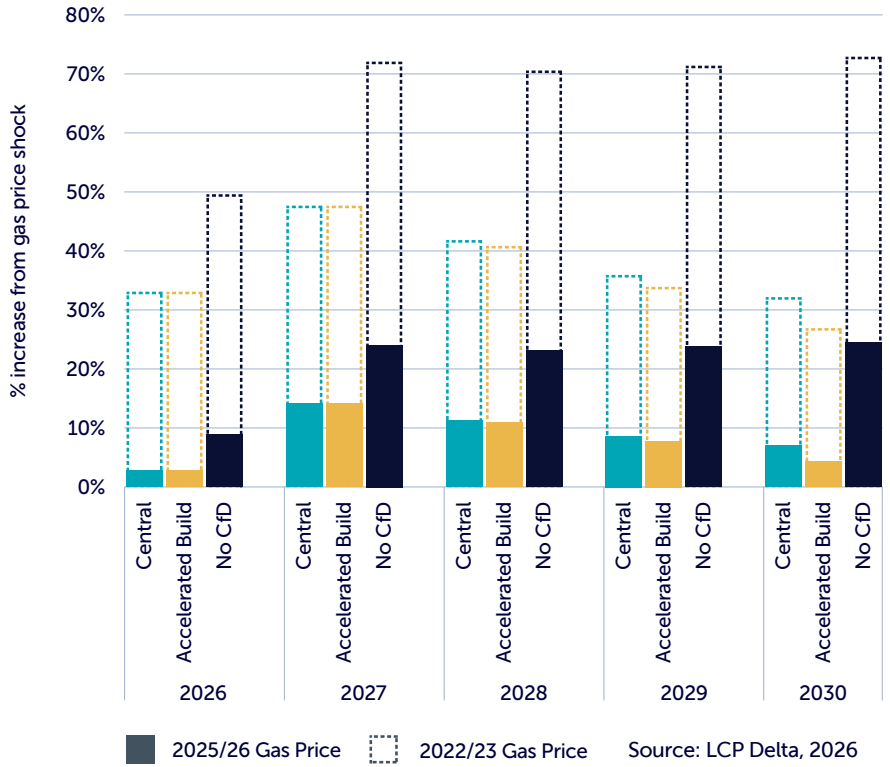
The UK is moving away from a more variable system where prices are driven by global events to one where more costs are fixed and driven by investments in homegrown infrastructure. This gives the country greater control over energy costs and means energy bills will become more stable.

Recent developments in the Middle East are a reminder that the UK's affordability challenge has not disappeared. The country remains exposed to disruptions in the supply of imported fossil fuels and an incomplete energy transition leaves households and businesses vulnerable to sudden price spikes.

This has further underlined the case for, and added greater urgency to, the direction the UK is already taking. Homegrown renewables, fixed-price contracts and electrification are helping to protect consumers from the full impact of global price changes.

These pressures go beyond energy bills. Rising global oil prices quickly feed through to higher petrol and diesel costs, increased manufacturing costs, and broader inflation across the economy.

The graph opposite shows what would happen to household energy bills in the event of a gas price shock similar to the one experienced in 2022, under different scenarios. The lower dotted lines in the 'central' and 'accelerated build' scenarios relative to the 'no CfD' scenario (black bar) show the extent to which having more fixed-price renewables on the system protect consumers from the worst of future price spikes.



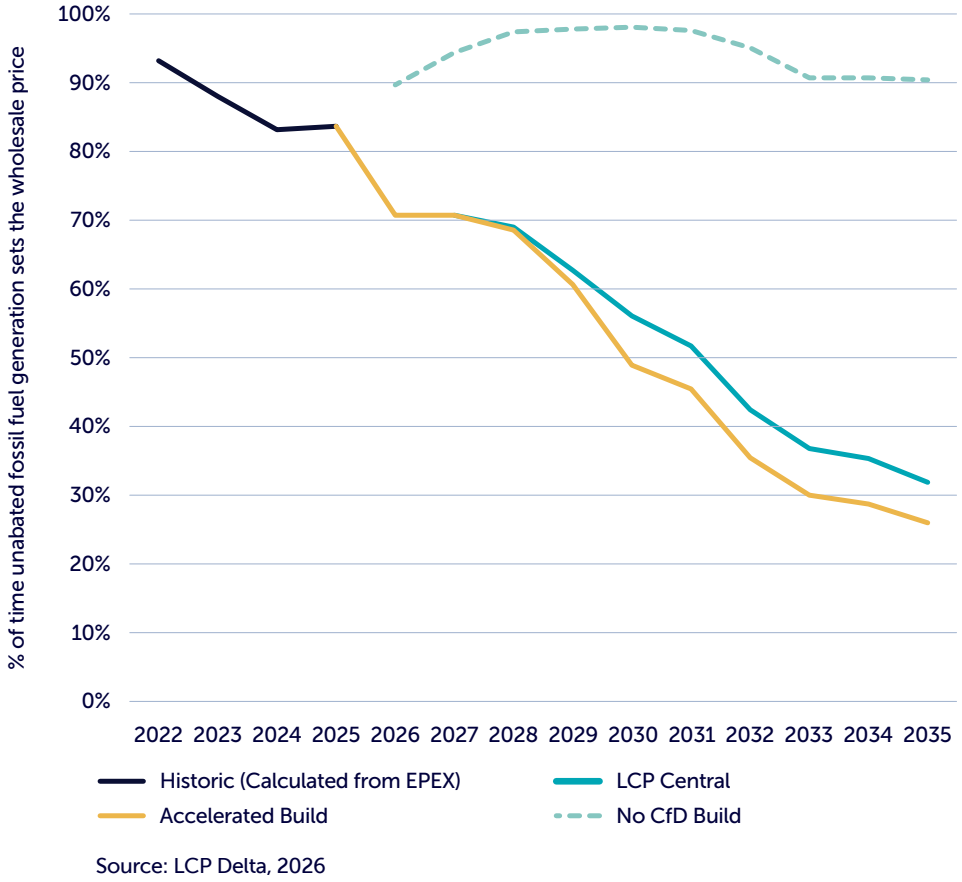
Scenario	Description
Central (Current Trajectory)	Reflects LCP Delta's view of likely build-out based on current policies, delivery rates and market expectations. In this scenario, clean power accounts for around 83% of generation by 2030, below the Government's 95% Clean Power target.
Accelerated Build	Assumes faster deployment of key technologies and supporting infrastructure. LCP finds clean power could reach around 90% of generation by 2030 if deployment, grid connections, network upgrades and constraint-management measures are accelerated.
No CfD	This scenario assumes no CfD-backed renewables on the system.

The link between gas and electricity prices is being broken

As we build more fixed-price renewables, gas sets prices less often and at lower levels, steadily delinking electricity from gas

Gas price shocks also impact electricity prices because, like in most markets around the world, the UK has a 'marginal pricing' system, which means that the most expensive generation on the system at any one time sets the price for everything else (apart from assets on fixed-price contracts like CfDs). There has been fierce debate on the subject of how this link between gas and electricity prices can be broken, and whether extreme market reforms are needed. However, new data from LCP demonstrates that, as we continue to build more fixed-price renewables, this link is being broken naturally.

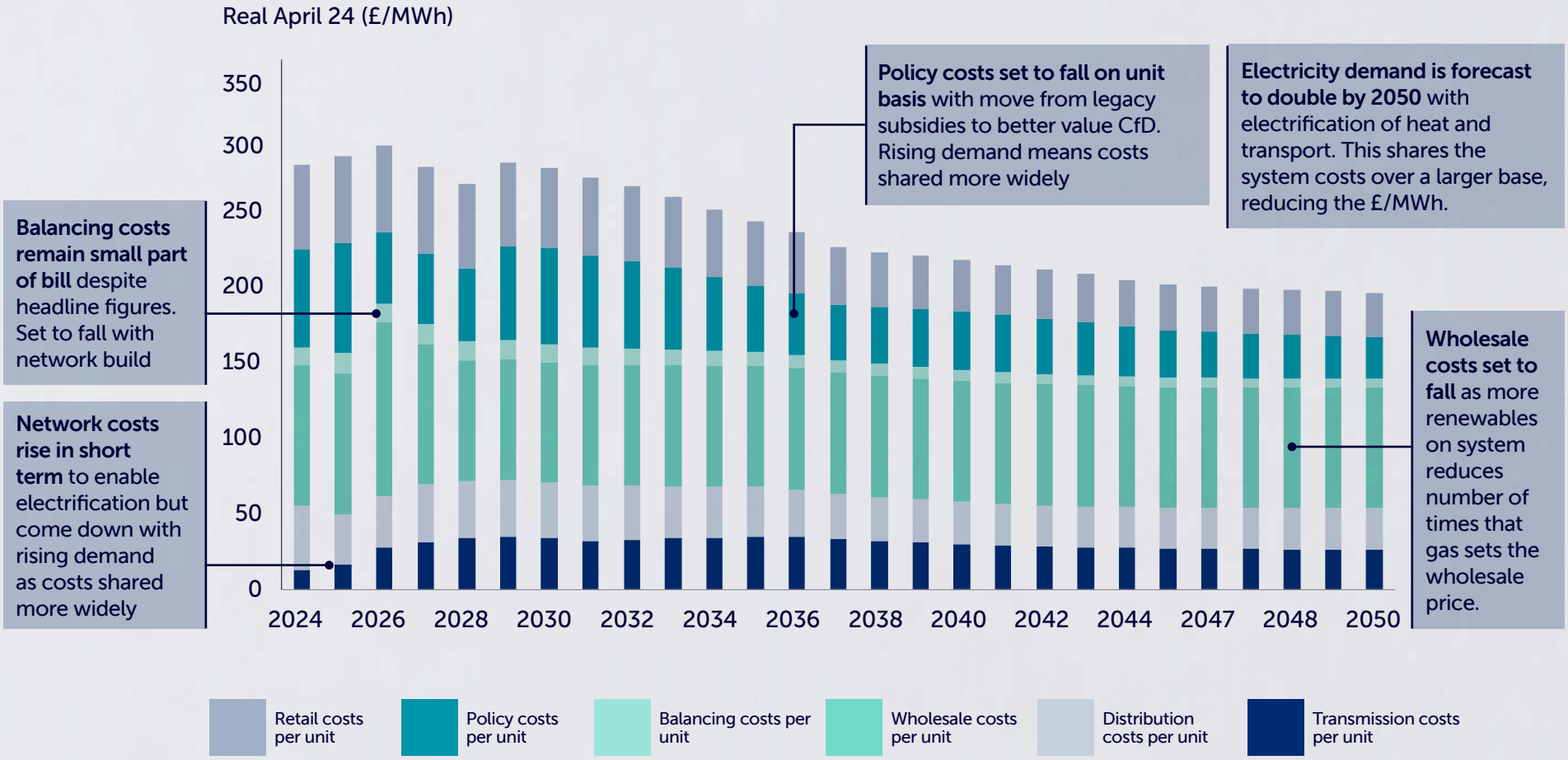
There will be longer and longer periods where renewables are meeting all of the UK's demand and therefore setting the price. And even when gas does set this price, having more renewables on the system suppresses the price paid to gas generators. SSE estimates wholesale prices since the outset of the recent conflict in the Middle East have been around 30% lower than they would have been thanks to renewables. Equally, as older support schemes for renewables fall away, the cost of renewables will fall further.



Source: LCP Delta, 2026

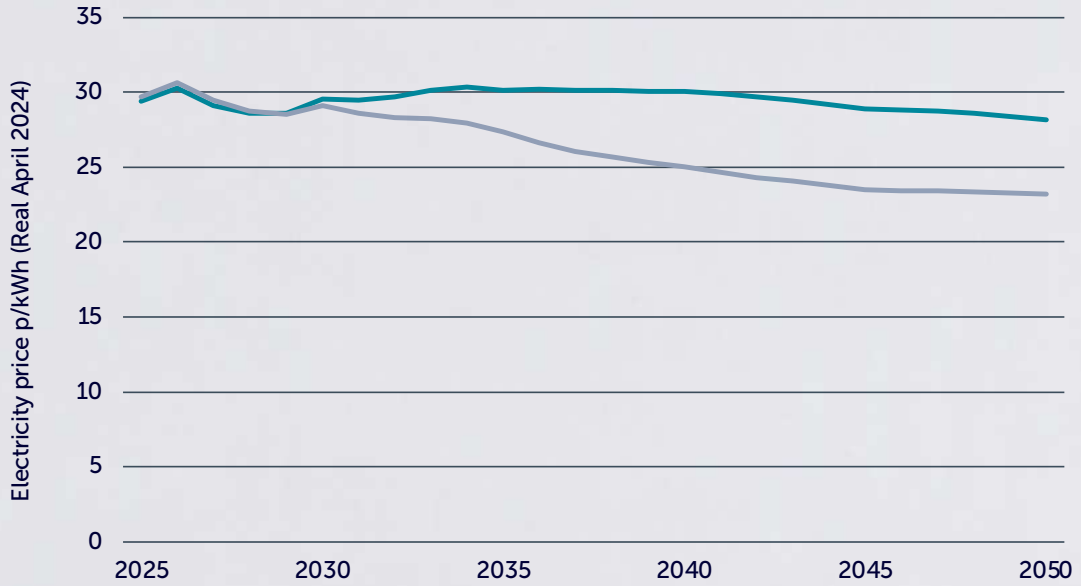
The transition to homegrown energy WILL cut electricity prices

Typical domestic electricity price per unit (£/MWh)



And the more we electrify, the more bills fall

Impact of electrification progress on electricity prices



Source: Ofgem (2026) and analysis by SSE

Recent experience shows why better coordinated planning across the energy system matters. Renewables have been built quickly, but grid investment has not always kept pace, creating bottlenecks and adding costs. This will improve as grid investment catches up, but it highlights the need for a more coordinated approach.

Investment on its own is not enough. As more electricity is generated, demand - for example from heating and transport - also needs to grow at the same pace. If generation, networks and demand aren't developed together, costs rise and the switch to electricity slows.

Equally, faster electrification will lead to a greater reduction in bills. Our modelling here also ignores the impact of commercial propositions to encourage more efficient use of electricity, which will mean the savings for individual customers are likely to be higher in practice

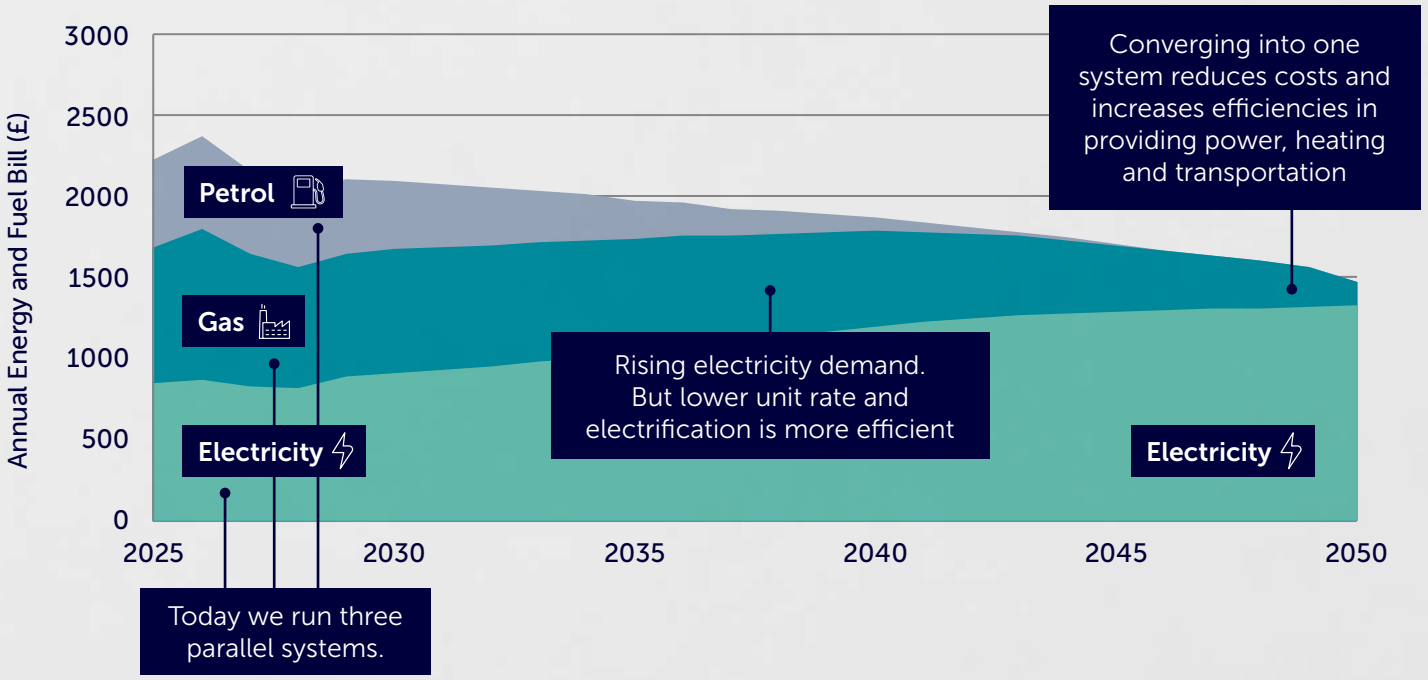
Delaying grid investment would slow the transition, increase costs over time, and leave households and businesses paying more in the long run. Building to keep ahead of future need is more cost-effective and helps keep the system stable as demand grows.

This is particularly pressing for the distribution network, where the next five-year price control is due to be agreed by Ofgem soon. While there are upfront costs to building grid capacity which need to be allocated fairly, this is a key enabler of long-term savings through greater use of electricity to power our homes and businesses, as well as of economic growth. Failure to invest strategically in grids now will ultimately increase costs for future consumers and become a barrier to innovation and competitiveness.

Electrification lowers bills overall

Electricity is a more efficient energy source and moving from three systems to one will mean a lower total fuel bill

GB household energy cost comparison



While homegrown electricity already helps cut costs and protects the UK from global fuel price shocks, these benefits grow as more energy use switches to electricity.

Moving from petrol and diesel cars and gas heating to electric alternatives will enable us to move away from running three parallel systems for power, heat and transport, and instead have a single integrated, cleaner and more efficient electricity system. This not only helps to reduce energy bills overall, but also boosts energy security since more of the UK's fuel needs can be met from homegrown, renewable sources within our control.

Tech-enabled flexible use, such as charging vehicles or heating homes at cheaper, off-peak times, can reduce costs and enable the country to harness and make use of more of its available energy. Strategic investment in distribution networks will be needed to unlock the full benefits of flexible, decentralised technologies.

The transition will need to be managed carefully, including the impact on the gas system and wider supply chains, to ensure it delivers benefits across the economy.

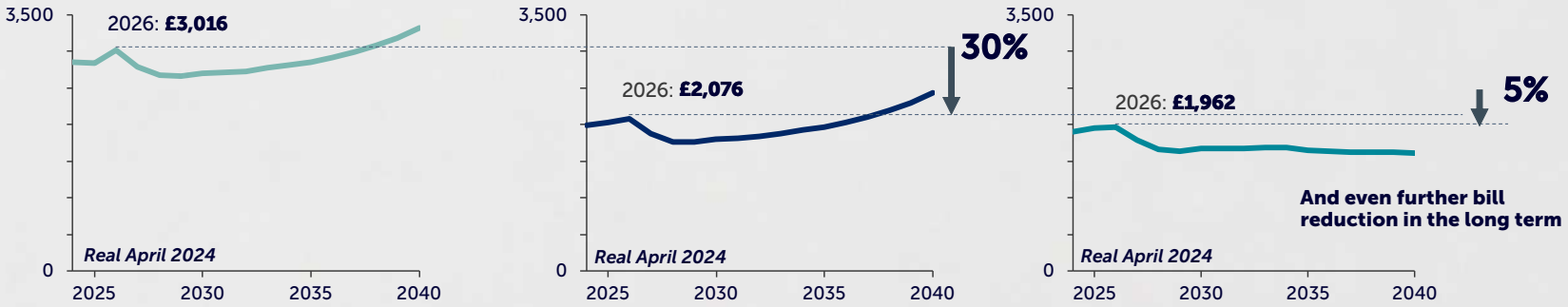
How and when consumers switch to electric alternatives will determine the savings they make

How switching to electric alternatives impacts customer bills

Gas boiler + petrol car | **Gas boiler + EV** | **Heat pump + EV**

A typical household started off with a gas boiler + petrol car... → ...they can reduce their bills by **30%** if they **switch to an EV**... → ...and a **further 5%** if they also **switch to a heat pump**

Household bill by consumption archetype, £ per year



Most households are likely to see lower overall energy costs, although this will depend on how and when they switch to electric options. For example, moving to an electric vehicle today could cut energy costs by around 30%, with a further 5% saving from switching to a heat pump.

Switching will become more affordable over time as technology costs fall and older cars, boilers and equipment are replaced. However, individuals' ability to switch to electric alternatives will vary hugely depending on where they live, their housing type and their ability to afford up-front costs. This means it will be vital to ensure that support is available for customers who are less able to pay, and to address infrastructure challenges around on-street charging, for example.

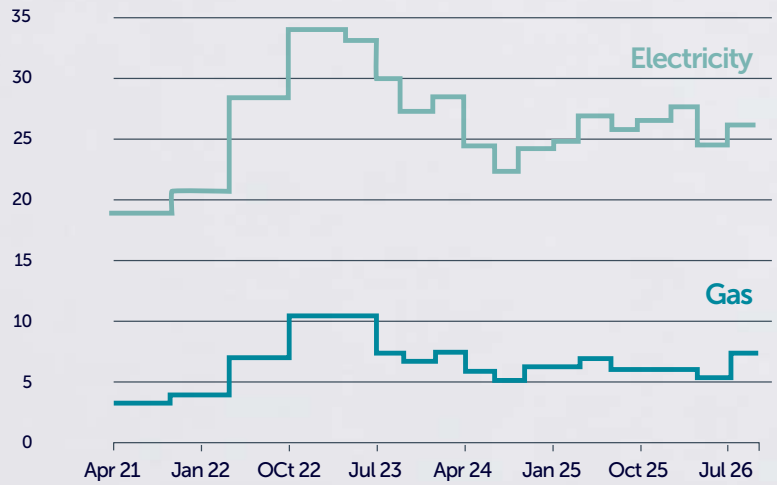
As the energy system electrifies, gas network and policy costs are recovered from a declining number of gas customers. This contributes to rising costs for households that remain reliant on gas, reinforcing the importance of making electrification accessible and affordable for all consumers, and of having a clear plan for the fair allocation of gas system costs as it is phased out.

But electricity is artificially expensive, slowing progress

To make heat pumps affordable and attractive to consumers we need to bring down the price of electricity relative to gas. At the moment, electricity is around 3.5x more expensive, largely because more government and support scheme costs are added to electricity bills than gas.

Closing this gap will mean shifting some of these costs off electricity or sharing them more evenly, helping make electric heating a more attractive option for households.

Electricity and gas prices



Ofgem 2026. Unit prices under price cap p/kWh inc. VAT direct debit dual fuel customers

The case for electrification is clear and compelling

An electrified economy, in numbers:

3x growth
in electricity's share of final energy demand

2x growth
in electricity demand

More than 50% growth
in electricity network capacity

66% increase
in average domestic electricity bills as consumers use more electricity

BUT 33% reduction
in total domestic energy bill, and 33% reduction in cost of electricity

The electrification race

Countries around the world are racing to shift more of their energy use to electricity, as renewables and battery costs continue to fall and nations look to reduce their dependence on fossil fuels.

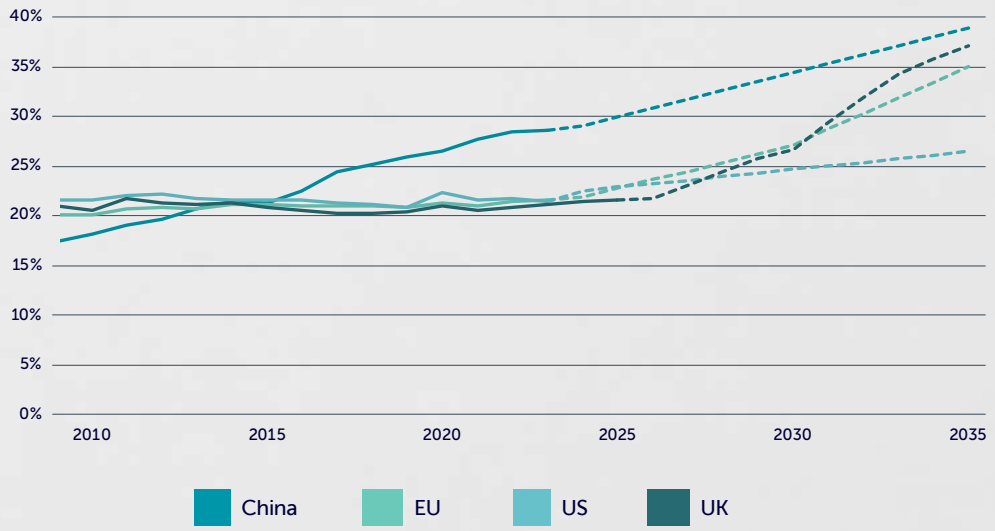
China shows how quickly this can move – increasing electricity's share of its energy system from 12% in 2000 to nearly 30% today, as it builds an economy powered more by homegrown electricity and less exposed to global price shocks.

By contrast, countries with large oil and gas reserves may continue to rely on fossil fuels in the medium term – but this is not a path the UK and Europe can depend on if they want to avoid repeated price shocks and improve energy security. Recent conflicts, including Russia's invasion of Ukraine and instability in the Middle East, have underlined that risk.

The EU is stepping up, with an Electrification Action Plan due in July, expected to set out a target for electricity to meet at least 35% of EU energy demand. The COP31 Presidency has proposed a global target to increase electricity's share of final energy demand to 35% by 2035, up from just over 20% today.

The UK already has ambitious electrification goals with Climate Change Committee and NESO modelling getting to 37-38% by 2035, 50% by 2040 and 62-64% by 2050. Delivering on this will help us close the gap with China in the competition to modernise through electrification-delivering energy security but also creating potential for new, exportable industries and revitalising the economy.

Electricity as a % of final demand

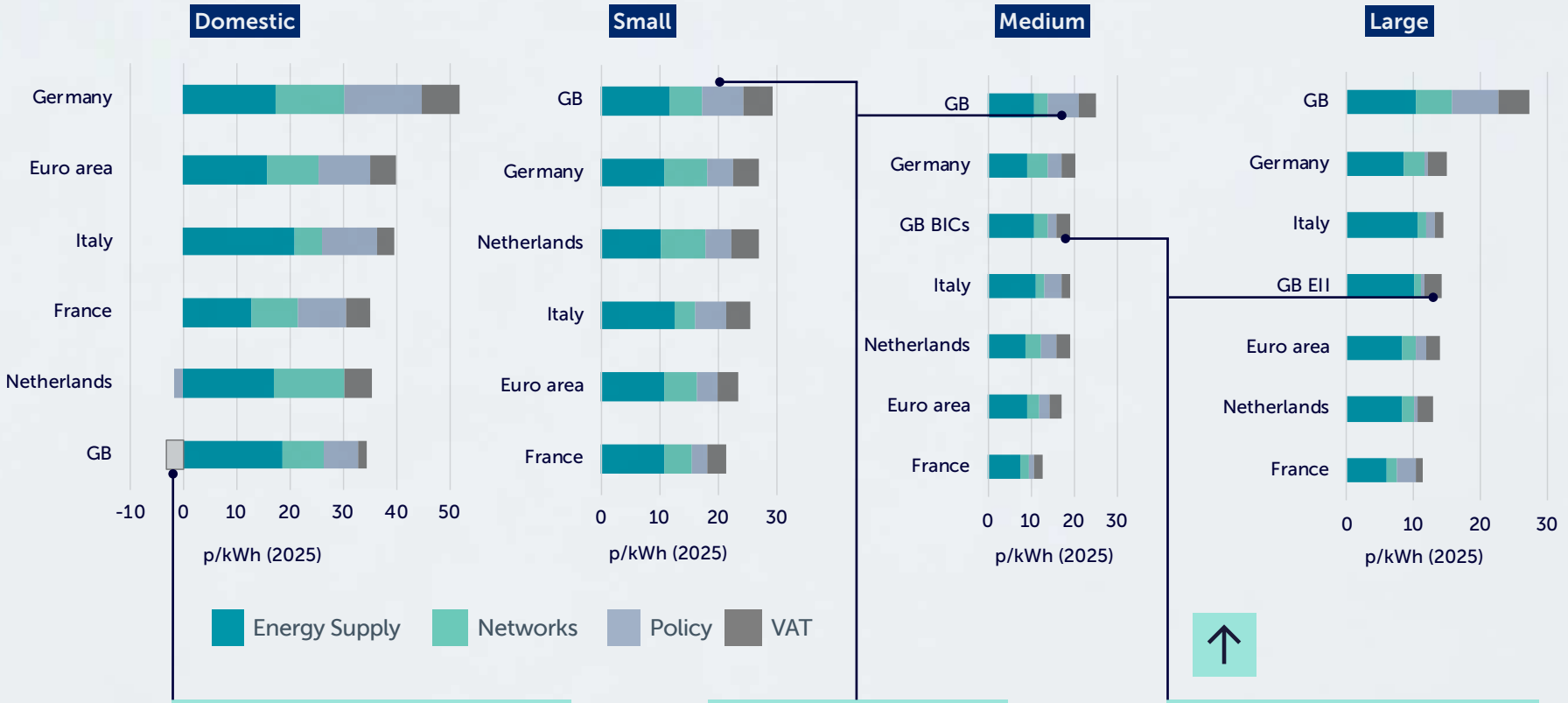


Source: IEA (2026, 'stated ambition'); UK 2035 data from CCC; and EU 2035 trajectory to align with its 2035 target

Costs of energy for business

High energy costs remain a major challenge for UK businesses. Reducing these costs must be a priority.

EU price comparison — breakdown



Removal of RO, low VAT and network burden mean GB domestic cost cheaper than EU average

GB places higher network and policy cost burden on larger consumers

With exemptions, GB Energy Intensive Industries (EII) are competitive with Europe

Source: Eurostat and SSE

Support for Small and Medium-Sized Businesses

How policy costs are recovered drives business energy costs.

Cutting industrial energy costs is central to growth and competitiveness. The Government has taken action to support energy-intensive industries through schemes such as the British Industrial Competitiveness (BIC) and Supercharger programmes, helping to level the playing field with European peers. This illustrates that differences between prices across Europe are reflective of differing policy choices about how certain costs are recovered. There is a clear case for maintaining and refining that targeted support, but also for going further — by looking again at how policy and network costs are allocated across the system and ultimately accelerating investment in electrification to deliver more sustainable, lower-cost energy for business.

But there is still a gap. Many small and medium-sized businesses – the "squeezed middle" of the economy — pay more than larger firms and do not currently receive targeted support. This raises important questions about how better to support SMEs, which make up a large share of the UK economy.

There are three practical steps Government could take to support investment and help businesses switch to electricity:

- Extending targeted support to SMEs by removing legacy policy costs
- Ensuring policy encourages electrification (for example through the Climate Change Levy)
- Reviewing how policy costs are shared across businesses

Taken together, these changes could save a typical business, such as a pub or restaurant, around £1,000 a year on energy bills.

What are the alternatives?

Alternative pathways exist, but no other options can offer the pace, cost and energy security benefits of a renewables-led system.

Electricity demand will grow significantly over the coming decades as transport, heating and industry increasingly electrify. Meeting that demand requires large volumes of new generation capacity; a challenge which will be exacerbated by large volumes of existing gas and nuclear plant reaching the end of their asset lives.

The choice is not between renewables and "doing nothing" – it a question of what technologies we invest in across renewables, gas and nuclear, to meet rising demand. When those options are compared on cost, risk and deliverability, renewables stand out as the most practical and affordable solution.

On a lifetime basis, wind and solar are now the cheapest sources of new electricity generation available to the UK. They have no fuel costs, low operating costs and declining technology risk.

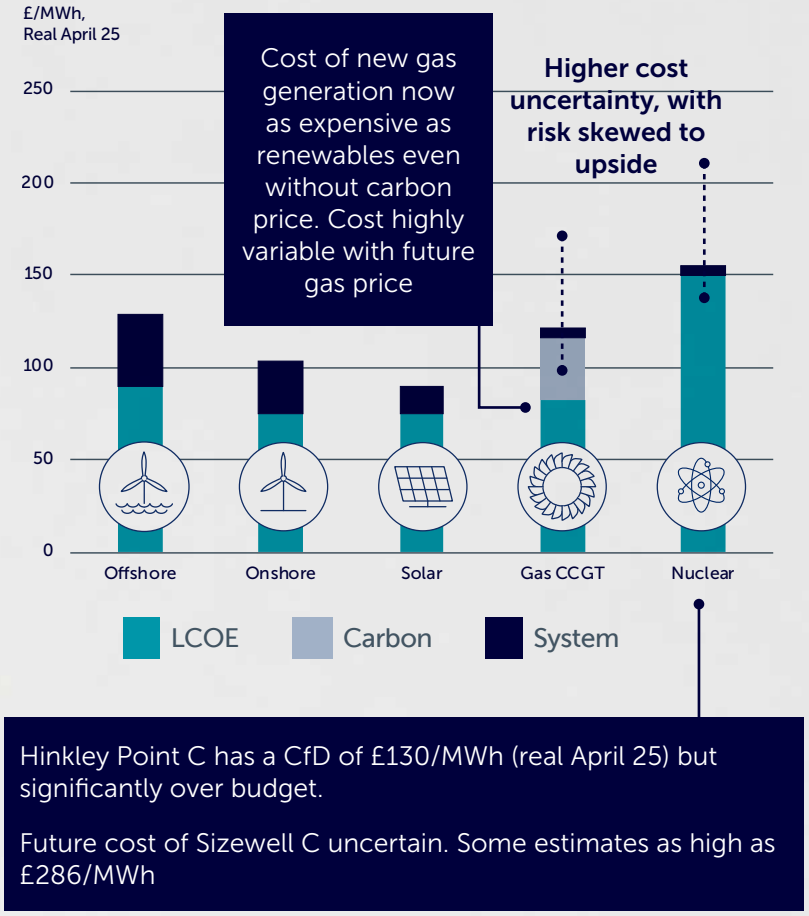
Crucially, the cost of delivering new gas generation has risen. Capital costs have risen sharply in recent years, and operating costs remain exposed to volatile global gas prices and carbon costs. A rush of demand for new gas turbines in the US has caused a supply chain crunch which means it wouldn't be possible for the UK to deliver new CCGT capacity until into the 2030s.

Even without putting a price on carbon, the lifetime cost of new gas generation is now broadly comparable to – or higher than – renewables. Once carbon costs are included, gas becomes structurally more expensive.

There are no credible alternatives that can deliver the required volume of new capacity at similar speed, scale and cost, while ensuring that projects pay back to consumers during periods of high prices.

2025 lifetime system cost

estimates by technology



Hinkley Point C has a CfD of £130/MWh (real April 25) but significantly over budget.

Future cost of Sizewell C uncertain. Some estimates as high as £286/MWh

Source: SSE analysis based on DESNZ (2026)

What now?

It is clear that building a homegrown, clean power system alongside the rapid electrification of demand is the only pathway to sustainably lower bills. The question then becomes: what action is needed to accelerate this?

Deliver homegrown energy infrastructure

Provide increasing protection for consumers from fossil fuel crises and support economic growth and supply chain development by delivering homegrown energy infrastructure. In practice, this means:

Build the grid as the platform for electrification

Deliver transmission and distribution grid upgrades and implement connections reform to get projects built faster.

Accelerate clean power deployment

Run ambitious AR8 and AR9 auctions, scale long-duration energy storage, and speed up planning and consenting.

Maintain system resilience during the transition

Ensure the Capacity Market supports life extensions for existing gas capacity, alongside early progress on CCS and hydrogen.

Create the right conditions for investment

Provide a stable policy environment to keep the cost of capital low and attract sustained private investment.

Drive electrification across the economy

The UK needs a comprehensive Electrification Strategy to ensure at least 35% of the UK's energy demand can be met by electricity by 2035 – up from 22% today – and 50% by 2040, including:

- Incentives, to ensure consumers are better off in electrifying.
- Infrastructure, to ensure the necessary grid infrastructure is in place to meet local energy needs.
- Removal of additional policy costs from electricity, either funding through taxation or levelling the playing field with gas.

Ensure the transition is fair and leaves no-one behind

While welcome progress has been made on removal of policy costs, more needs to be done to support a squeezed middle of businesses, and protect vulnerable consumers in, Government should:

- Broaden and extend bill support in time and breadth.
- Fund bill protections via general taxation.
- Use Wholesale CfDs to reduce long term costs and provide greater price protection for consumers.
- Use improved data matching powers to introduce Social Tariff.
- Introduce targeted support for vulnerable consumers less able to electrify, and develop a plan for the fair allocation of legacy gas network and decommissioning costs.

References

[SHGH, Online nationally representative survey (GB), 11 - 15 June, n=2013]

SSE commissioned Stonehaven to conduct an online poll with a nationally representative sample of 2,013 UK adults between 11 June - 15 June 2026.

The results are weighted by interlocking age & gender, region and social grade to nationally representative proportions. Stonehaven is a member of the British Polling Council (BPC) and the Market Research Society, and abides by their rules.

For more information, contact the Stonehaven polling team: polling@stonehaven.uk.com

Historic domestic energy bill breakdown: Ofgem

Historic non-domestic energy bill breakdown, Eurostat (EU) SSE internal pricing data (GB)

Forecast assumptions:

Electricity and gas demand: NESO FES Holistic Transition

Wholesale gas and electricity prices: market futures priced June 2026

Network costs: Transmission and Distribution operator business plans

Policy costs: DESNZ, LCCC + SSE internal projections

Supplier costs: As per current price cap methodology, Ofgem.

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