



# Why Britain Needs an Energy-Strategy Reset

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# Executive Summary

The most effective contribution that the United Kingdom can make to tackling climate change is to reset its energy strategy. This is not a departure from the UK's commitment to reach net zero by 2050, but a recognition that delivering it will depend on building an energy system that is affordable, reliable and capable of supporting electrification at scale.

Energy policy is not an objective in itself: it is an example of infrastructure policy. Its purpose is to provide the power needed for homes, industry, transport, digital infrastructure and the next generation of energy-intensive technologies, from AI to advanced manufacturing. And it needs to be available at a cost that households and businesses can afford, with the level of reliability that society expects.

As it stands, a single organising mission sits at the heart of government strategy: Clean Power 2030. The objective is to decarbonise the electricity system as far and as fast as possible within this decade. Success is being measured in gigawatts contracted and projects approved, with progress measured against a headline delivery target.

That framing makes the strategy legible and mobilising, of course – but it also restricts the definition of success. This narrow focus on whether power is clean means the system has lost sight of whether it is cheap, secure and capable of powering a modern economy.

There is no question that Clean Power 2030 has been implemented with discipline and consistency; the problem comes down to what the system is being asked to optimise for. Policy success is measured by proxies rather than the outcome that ultimately matters: abundant, affordable electricity that sustains growth, enables electrification and maintains public consent for climate action.

Clean Power 2030 implicitly treats cost as a downstream issue: something that will take care of itself once enough clean capacity has been created. Yet the reality is that if energy becomes too expensive, everything else comes under strain: electrification stalls, industry relocates, households resist and climate ambition collapses under political pressure.

The consequences extend beyond how the UK generates power: they shape how energy security is managed, how domestic resources are treated and how the fiscal foundations of the transition are built. Again and again, energy is being approached as a subset of climate policy, rather than a central pillar of prosperity, innovation and national power.

If Clean Power 2030 was ever fit for purpose, that is no longer the case: the world has changed economically, technologically and geopolitically. The UK's energy framework has not adapted to these new circumstances and as a result, policy is drifting away from the fundamentals that it must serve.

The UK needs a reset. Not to take it away from climate ambitions (the Net Zero by 2050 target must stand firm), but to implement the approach that will make those ambitions a reality: an energy strategy grounded in economics, system performance and political durability.

The reset has to begin with recasting what the system is optimising for: *Cheaper Power 2030* should become the organising objective of electricity policy. This means a relentless focus on making the system work – through market reform, planning reform and strategic grid development – and ensuring that any renewable capacity supported by the government demonstrably lowers electricity bills based on realistic assumptions. This is what will ultimately unlock the electrification that is needed to deliver net zero between now and 2050.

Once the revised objective has been set, the rest of energy policy must follow. For example, the UK should create an investible North Sea basin to underpin energy security, fiscal strength and a managed transition. And it should place innovation, not deployment targets, at the centre of long-term energy strategy.

The focus has to be on the technologies and system capabilities that can deliver abundance over time.

# 01

## The World Has Changed – UK Energy Policy Needs to Catch Up

Clean Power 2030 was conceived in a different context from today. It assumed falling renewable costs, manageable grid expansion and moderate demand growth, and was based on a global economy characterised by integrated markets and strong multilateral institutions. In that world, speed of decarbonisation could plausibly be held up as a benchmark of success.

That world has gone.

Three key structural shifts now define the energy landscape – and none is adequately reflected in the UK's current strategy.

### Shift 1: Rising Electricity Demand Is the Key to Economic Performance and Climate Delivery

Electricity demand sits at the heart of economic growth, industrial competitiveness and decarbonisation itself. For much of the past two decades, advanced economies such as the UK were able to grow while using less energy, driven by efficiency gains and structural economic change. Its final energy consumption peaked in 2001,<sup>1</sup> while electricity demand has declined by about 25 per cent since 2005.<sup>2</sup>

The next phase of economic growth needs to be electricity intensive, driven by two structural forces.

First, the rise of artificial intelligence. Electricity is fundamental to the AI era: training, running and scaling advanced models requires vast amounts of computing power, which is why there is now a global race to build data centres at scale. The Institute of Economic Affairs projects that global electricity consumption by data centres will more than double by 2030 (twice what was forecast only a year ago) with AI alone accounting for about 3 per cent of global electricity demand by the end of the decade.<sup>3</sup>

The UK has many of the ingredients required to be a serious global player in the AI era – but cheap and available electricity is the critical constraint. While the UK should not aim to host all the compute capacity it needs domestically, the government’s plans still envisage that the country will need more than 6 gigawatts (GW) of domestic data-centre capacity by 2030, rising to around 11 GW by 2035.<sup>4</sup> Respectively, that is equivalent to about 8 per cent and 15 per cent of today’s installed electricity capacity.<sup>5</sup> Electricity cannot be considered as just a household utility: it is a core input to technological sovereignty and economic power.

The second structural force driving this is the electrification of the wider economy. Electrification is now the primary route to decarbonisation across transport, heat and industry (see [\*Powering the Future of Britain: How to Deliver a Decade of Electrification\*](#)), ushering in what analysts call an electrotech revolution: a step-change in how energy is generated, used and integrated.<sup>6</sup> All credible net-zero pathways for the UK, including those developed by the Climate Change Committee, increasingly rely on large-scale electrification as the only viable route to deep emissions reduction.<sup>7</sup>

Together, these forces fundamentally change the impact of electricity prices. And the cost of power is a core driver of the future success of the British economy – in that it will determine whether decarbonisation and AI deployment happens at all.

## Shift 2: The Economics of Clean Power Have Changed

For much of the past decade, renewable-energy costs fell rapidly. Policymakers have grown accustomed to a world in which adding clean capacity reliably reduces prices, and where scale alone can be relied upon to deliver affordability.

The reality now is that the cost of creating new clean power has risen across much of the system. Inflation, higher interest rates, constrained supply chains and global competition for key components have pushed up capital costs. This is evident in the upward trajectory of strike prices at

offshore-wind auctions in recent years. In 2019's Allocation Round 3, offshore wind cleared at the lowest prices recorded: about £55 per megawatt hour (MWh) based on 2024 prices. By contrast, Allocation Round 5 in 2023 failed to attract a single offshore-wind bid, as no project could be delivered below the administrative strike price.

Allocation Round 6 in 2024 subsequently cleared at £82/MWh (2024 prices), reflecting sharply higher capital costs, financing conditions and system risks. In Allocation Round 7 (2026), offshore-wind projects secured contracts at strike prices of about £90/MWh in 2024 prices, reduced due to the five-year extension of the contracts awarded to those projects. This was despite strong competition.

The direction of travel is clear: offshore-wind costs have risen materially from their 2019 low, reversing the assumption that scale alone would continue to drive prices down.

In addition to the pure capital cost of renewables, the cost of integrating them in the energy system has also proven to be higher than expected, and at higher levels of penetration. As a result, electricity prices are now shaped less by the marginal cost of generation and more by the total system cost. In this environment, adding clean capacity at the margin can raise costs rather than lower them, especially when deployment is rushed, poorly located and/or poorly integrated.

## Shift 3: Energy Is a Strategic Determinant of Hard Power

For much of the post-Cold War period, advanced economies treated energy as a background condition: something to be decarbonised, liberalised or regulated, but rarely a strategic asset in its own right. This approach rested on a set of assumptions – open global markets, stable supply chains, cheap capital and a broadly rules-based international order – that allowed energy security to be outsourced to markets.

However, as geopolitical competition, in particular around AI, has intensified and the liberal multilateral order has weakened, energy has once again become a core instrument of state power. Supply chains are no longer assumed to be reliable, trade is increasingly weaponised and capital is more expensive and political. In this environment, access to abundant, reliable and affordable energy directly shapes economic growth, industrial capacity, technological leadership and geopolitical influence.

The United States now treats energy abundance as a pillar of its national strategy.<sup>8</sup> It has become the world's largest producer of oil and gas, insulating its economy from price shocks and using energy dominance as a source of strategic leverage. At the same time it is investing heavily in nuclear power, grid expansion and fossil-fuel expansion to absorb surging demand from AI, data centres and advanced manufacturing.

China has reached the same conclusion by different means. It is expanding electricity supply at an unprecedented scale across every technology – renewables, nuclear, coal and storage – because it understands that energy scarcity is incompatible with industrial ambition. Cost, scale and system resilience dominate decision-making. At the same time, they are electrifying their economy at scale to become increasingly self-sufficient.<sup>9</sup> Decarbonisation is pursued through expansion, not constraint.

Against this backdrop, the UK's energy strategy of fixating on delivery against a single decarbonisation target looks unduly limited. Those three shifts don't merely complicate Clean Power 2030: they invalidate its organising logic. Electricity prices remain high, demand is weakening and industrial competitiveness is eroding.

In a world where energy is once again a source of national strength, this is no longer a neutral policy choice. It is a strategic one – and it is the wrong one.

# 02

## Redefining UK Climate Leadership for Today's World

The three global shifts outlined in the previous chapter change how the UK's climate role should be understood.

Climate change is a global problem that cannot be solved through national action in isolation. The UK accounts for less than 1 per cent of global greenhouse-gas emissions, which means that even if the country achieved complete domestic decarbonisation it would have a negligible effect on global temperatures. That doesn't diminish the importance of UK action, but it does require a recalibration of how the country can make an impact. The UK's real climate contribution lies not in the arithmetic of its emissions reductions, but in whether it can demonstrate a model of decarbonisation that others have an incentive to follow: cutting emissions while keeping energy affordable, economies competitive and public consent intact.

A strategy that delivers decarbonisation by raising electricity prices, hollowing out industry and testing political patience is unlikely to be replicated. If the UK demonstrates that clean power means expensive power, it will undermine global climate action rather than help it to advance.

Affordability is therefore not a distraction from climate leadership: it is the main condition of making it a success. There is also a broader strategic implication: in a world where climate outcomes are shaped by major powers' technological leadership and ability to influence global rules and markets, the UK's economic and geopolitical strength matters. Its ability to shape global norms, finance, technology deployment and international cooperation depends on remaining a prosperous and capable actor on the world stage. An energy strategy that undermines growth and competitiveness in the name of climate ambition ultimately weakens the very influence required to deliver it at scale.

This does not mean that the UK should abandon its target to reach net zero by 2050. Quite the opposite, in fact: delivering cheaper power is the prerequisite for delivering the electrification of the economy that is needed. That is why making electricity cheaper was top of the recommendations made to the UK government by the Climate Change Committee in 2025.<sup>10</sup>

An energy-strategy reset is a climate win.

## Clean Power 2030 Drives the Wrong Decisions

Because Clean Power 2030 has become the overarching mission for energy policy, it dictates strategy and systematically rewards the wrong behaviour. One of the most common misconceptions is that, even if the 2030 target is flawed, it is harmless and therefore there are no downsides to keeping it in place. That is not the case. This kind of objective shapes incentives – and incentives shape outcomes.

Clean Power 2030 treats progress as something that can be counted: gigawatts contracted, projects approved, milestones met. That might make policy legible and politically communicable, but it also makes it distortive. When the organising objective is to maximise clean capacity against a deadline, the system predictably prioritises what is fastest and easiest to contract, rather than what makes the electricity system cheaper, more resilient and better able to support rising demand. Those same signals flow directly into corporate decision-making, shaping investment horizons, boardroom priorities, financing structures and technology choices. This reinforces a system optimised for delivery speed rather than long-term performance.

The result of this framing is an energy policy that optimises for delivery against a target, rather than performance in the real economy. Here are some of the key ways in which this manifests.

- **Contracts are signed for volume, not value.** The system locks in long-term deals to hit procurement volumes, even when pricing reflects unfavourable financing conditions or poor system fit; in turn, this embeds

costs for decades rather than capturing future cost reductions. In fact, contracts for difference (CfDs) have been reformed to lock in prices for longer and reduce headline costs – which in turn locks in problems for longer. This was illustrated by the government’s most recent offshore-wind allocation round, which locked in a record volume of offshore wind at about £91/MWh (in 2024 terms), with 20-year contracts linked to the consumer price index. This is at best cost neutral compared to currently high prices, and at worst locks in higher prices for decades to come.<sup>11</sup>

- **Grid constraints are treated as collateral damage.** Generation is contracted faster than the network can accommodate it, driving higher congestion, curtailment and balancing costs – all of which are paid for by consumers. This unmet demand can result in costly inefficiencies: for example, the UK paid £1.5 billion to turn off wind farms and turn up gas stations in 2025.<sup>12</sup>
- **Grid is over-developed.** The UK is currently building grid to help integrate renewables where they stand, without consideration of how to minimise grid buildout by placing supply closer to demand. While additional grid will be needed for renewables and electrification, expensive expansions to add incremental capacity are questionable. For example, the 600 MW Shetland HVDC link (a subsea power cable connecting Shetland to the mainland) was costed at about £790 million in 2024 terms, equating to more than £1.3 million per MW of capacity. Combined with the cost of the wind farm itself, the effective cost per MW is far higher – a cost ultimately socialised across consumers.<sup>13</sup>
- **System optimisation is deferred.** Market reform, locational signals, demand-side flexibility and storage integration are repeatedly postponed because they complicate delivery and undermine investment cycles for Clean Power 2030 – yet they are central to affordability. A move to locational pricing could have saved consumers £55 billion by 2050,<sup>14</sup> but that approach was rejected in order to attract maximum investment in clean power.
- **Demand is the missing variable.** Electricity demand remains weak because power stays expensive. Fixed system costs are then spread across a smaller base, pushing unit prices higher and making electrification harder – a vicious circle.

- **Gas continues to set the price.** Even with rising renewable penetration, the marginal price is generally still set by gas – about 85 per cent of the time.<sup>15</sup> But even in a Clean Power 2030 scenario, the National Energy System Operator (NESO) suggests that gas could still be setting the price up to 47 per cent of the time.<sup>16</sup> This leaves households and industry exposed to volatility while paying the additional costs of an increasingly complex system.

These are not implementation glitches: they are the predictable consequences of an objective that prioritises volume of clean energy over value of energy. In today's electricity system – where capital costs, grid constraints and integration costs dominate – an approach that rewards speed and scale will reliably drive prices up.

This matters because Clean Power 2030 does not simply rest on outdated assumptions: it misrepresents how affordability now emerges in the electricity system. It continues to treat cost reduction as an automatic by-product of deployment, even as the underlying economics of clean power have shifted.

In a world of higher interest rates, tighter supply chains and rising system and integration costs, speed is no longer a proxy for value. An objective built around maximising clean capacity additions without adequate consideration of total system cost is therefore no longer fit for purpose.

The problem, in other words, is not only how Clean Power 2030 is being implemented, but also what the system is being asked to optimise for. And it is British consumers and industry that are left exposed: households facing persistently high electricity bills and businesses operating with power prices around twice those in the US. Those businesses are struggling to electrify, invest and compete in an increasingly electricity-intensive global economy.

## Cheaper Power by 2030: The Mission That the UK Actually Needs

Instead of Clean Power 2030, the organising objective of electricity policy should be Cheaper Power by 2030. This would put the system on a credible path to lower electricity costs over time while maintaining a clear decarbonisation trajectory.

Cheaper Power 2030 is not a retreat from climate ambition. Rather, it is the only version of climate ambition that survives contact with economics, politics and geopolitics.

The reality is that electricity costs cannot be significantly reduced at a rapid pace. Marginal improvements can be made, but the factors that make UK electricity expensive today are the result of decisions made over the past two decades, meaning they will be embedded in the system for several years to come. This includes legacy policy costs, network-upgrade needs and balancing costs.

In the absence of rapid cost reductions, the emphasis needs to be on setting the right trajectory. Under a cheaper-power objective, no major policy decision would be taken unless it could demonstrably reduce system costs over time. As set out in our previous paper [Cheaper Power 2030, Net Zero 2050: Resetting the UK's Electricity Strategy for the Future](#), a cheaper-power objective would:

- **Prioritise system-cost minimisation, not just clean capacity.** This does not mean no investment in renewables (which could help lower the cost of electricity in some cases), but it does mean strict cost caps on contracted renewables that adequately account for broader costs to the system. Reforms to the current CfD system could be needed to help ensure this.

- **Treat network capacity as scarce and expensive.** The grid needs to be built at pace, requiring significant planning reform. However, the focus should be on building the network that is actually required, not what is needed to integrate the clean capacity that Clean Power 2030 incentivises.
- **Use long-term contracts selectively, not reflexively.** Long-term contracts can reduce financing costs and support strategic capacity, but they also lock consumers into today's assumptions about technology costs, demand and prices. A cheaper-power strategy would preserve optionality, using long-term contracts where they clearly reduce risk and cost. It would also allow greater exposure to competition, short-term markets and future cost reductions where appropriate.
- **Bring market reform to the centre of policy.** A power system dominated by variable, capital-intensive generation cannot run effectively on market rules designed for a fossil-fuel system. Market design must evolve to better reward locational and temporal factors.
- **Create a bespoke energy strategy for AI, including the use of gas turbines and nuclear power stations.** The UK should take a more active approach in pursuing off-grid solutions and other novel ideas to support energy connections for the AI data centres that the country needs. This could include facilitating AI data centres to connect to gas turbines to rapidly scale capacity, as outlined in our previous paper [Sovereignty, Security, Scale: A UK Strategy for AI Infrastructure](#).

This would not only put the UK back on a path towards lower prices and enhanced competitiveness, but also restore the link between decarbonisation and public consent. People will not electrify their homes or businesses if electricity remains expensive. No country has electrified at scale with high power prices; the UK will not be the first.

A cheaper-power strategy therefore requires honesty about uncertainty, particularly regarding future gas prices. Current policy implicitly assumes that gas will remain expensive, meaning the system is designed around minimising exposure to gas at almost any cost. This approach risks locking consumers into high-cost alternatives if those assumptions prove wrong.

In practice, the assumptions underpinning current system modelling are highly conservative. NESO scenarios assume gas prices broadly in line with mid-October 2024 levels (about 101 pence per therm), significantly above the Department for Energy Security & Net Zero's own central projection of about 72 pence per therm. NESO also assumes very high carbon prices – about £147 per tonne of CO<sub>2</sub> compared with roughly £38 today – alongside an additional counterfactual £25 carbon penalty applied to gas-fired power stations.

There is no guarantee that these conditions will hold. Global gas exploration continues at pace, liquefied natural gas (LNG) capacity is expanding, and geopolitical outcomes – including any future settlement of the war in Ukraine – could materially change European gas markets. If prices fall or volatility eases, a system designed to avoid gas at almost any cost risks imposing unnecessary expense on consumers.

Moreover, key elements of gas pricing are not exogenous: the UK government directly controls how gas-fired generation is taxed. Removing distortive policies such as the Carbon Price Support for electricity generation would materially reduce costs without increasing emissions relative to alternatives already in the system. The Centre for British Progress has found that this tax increased electricity costs by more than £3.50 for every £1 it generated for the Exchequer in 2024.<sup>17</sup>

Climate realism does not mean betting on gas – it means preserving system optionality. Keeping existing gas capacity available, avoiding unnecessary power-sector penalties and allowing demand to co-locate with firm generation are rational risk-management choices in an uncertain world. They reduce costs, lower risk premiums and avoid premature lock-in, while still allowing gas reliance to fall over time as cheaper, firmer low-carbon alternatives scale.

## Utilising the North Sea

A cheaper-power objective requires realism about the wider energy system, including fuels that are already embedded in it. North Sea oil and gas will not materially reduce UK electricity prices, and they should not be defended on that basis. But that does not make them irrelevant to an energy strategy grounded in economic and political durability.

The UK has been a net importer of energy since 2004, after decades as a net exporter powered by North Sea oil and gas.<sup>18</sup> North Sea production peaked in 1999<sup>19</sup> and has since fallen by about 68 per cent, as reserves have matured and investment has lagged.<sup>20</sup>

There is no doubt that the North Sea is in decline: in 2022, the UK replaced only 3 per cent of production with new reserves.<sup>21</sup> But current policy is accelerating that decline beyond what is economically or strategically necessary. The Energy Profits Levy (known as the windfall tax) raised the effective tax rate on oil and gas producers to 78 per cent (and even higher for many operators), which is among the highest globally.<sup>22</sup> Coupled with the ban on new exploration licences and heightened regulatory and litigation risk around environmental assessments, this has sharply increased policy risk and driven capital out of the basin.

Industry projects that about 7.5 billion barrels of oil and gas could still be produced from UK waters. This additional production could add £165 billion in economic value and meet a larger proportion of UK demand from domestic sources.<sup>23</sup> New exploration will not generate immediate fiscal returns, given the long lead times between discovery and production. Instead, the fiscal case is about sustaining the taxable base over the long term by avoiding premature decline of assets that will otherwise continue producing for decades.

The reality is that oil and gas will remain part of the UK energy mix for years to come. Of course, the aim should be to increase the proportion of the UK economy that runs on electricity at pace; currently it is just over one-fifth.<sup>24</sup> But even in the most ambitious net-zero scenarios, oil and gas will be required to power the UK economy until 2050 and beyond.

In a world of rising energy demand, tighter public finances and intense geopolitical competition, the UK cannot afford to treat domestic production as a moral signal rather than a strategic asset. A stable, investment-friendly approach to the North Sea strengthens the political economy of the net-zero transition in four important ways.

- 1. It sustains fiscal capacity at a time when public finances are constrained, by preserving investment and the long-term taxable base of the basin.** This strengthens fiscal capacity, reduces pressure on households and makes the broader transition more affordable and politically sustainable.
- 2. It reduces net import exposure and improves resilience to international market and geopolitical shocks.** Even as UK production declines, the country will continue to consume oil and gas for decades. Allowing domestic production to fall faster than demand simply increases exposure to international markets and geopolitical risk, without reducing global emissions.
- 3. It supports a managed transition for workers, regions and supply chains.** Abrupt policy shifts that undermine investment do not accelerate decarbonisation. Instead they destabilise communities, erode consent and weaken the industrial base needed for the next phase of the energy transition.
- 4. It means that domestic production avoids higher-emission alternatives.** Imported LNG typically carries a far higher lifecycle carbon footprint than UK gas.<sup>25</sup> From a climate-realist perspective, cleaner domestic production is preferable to outsourcing emissions while claiming territorial progress.

The UK can draw lessons from Norway's approach. This does not necessarily mean lower taxation, but long-term stability and predictability, as well as full investment deductibility within a clear fiscal framework – even at high headline tax rates.

The UK should therefore pursue policy levers that make the North Sea basin genuinely investible – and that starts with restoring fiscal predictability. As analysis by Wood Mackenzie has argued, the challenge for mature basins is

not simply the level of taxation, but the design of “smart upstream taxes” that balance revenue capture with stable incentives for continued investment during the transition.<sup>26</sup>

The repeated expansion, extension and redesign of the Energy Profits Levy has materially increased policy risk, raised hurdle rates and deterred long-term investment in mature assets that already face geological decline. A stable framework should bring the Energy Profits Levy to an orderly close and replace it with a predictable long-term fiscal regime, limiting ad-hoc changes to headline rates and providing certainty on capital allowances so that investment decisions can be based on economic rather than political timelines. The objective is not to reduce taxation per se, but to replace volatility with predictability so that investment (and therefore lifetime tax receipts) are preserved. Recent reporting has highlighted growing concern that repeated changes to the Energy Profits Levy, and uncertainty over its future shape, are deterring investment in an already mature basin.<sup>27</sup>

The Office for Budget Responsibility has suggested that reform of the Energy Profits Levy would reduce near-term revenues.<sup>28</sup> But a relatively high bar placed on factoring changes in investment behaviour into forecasting assumptions risks underestimating how fiscal uncertainty, alongside licensing bans and wider regulatory risk, has accelerated asset decline, infrastructure retirement and capital flight in a mature basin. These dynamics weaken the long-term tax base in ways that are difficult to reverse and merit closer scrutiny in future fiscal assessment.

Alongside this change, the government should also reverse the ban on new exploration licences. A managed-decline strategy requires continued exploration to sustain economically viable production, protect supply chains and slow – rather than accelerate – the loss of domestic capacity. New licences should be granted a clear framework, focused on projects that are commercially viable, less carbon-intensive than imported alternatives and compatible with a declining long-term production profile.

This is not about slowing the transition or denying the direction of travel – it is about making the transition governable. An energy strategy that ignores revenue, security and political consent in pursuit of symbolic purity will not endure – and it will not deliver the climate outcomes it promises.

## Innovation Needs Cheap Power, Not High Bills

A reset of the UK's energy strategy must place innovation at its core – not to create a slogan, but as a governing principle.

The global energy transition is far from a technological endpoint, in that innovation in energy systems is accelerating rather than slowing. The hardest challenges – firm low-carbon power, system balancing at scale, long-duration storage, industrial electrification and last-mile decarbonisation – will be solved not by deployment targets alone, but by sustained technological and system innovation.

Innovation is the route to energy abundance. The world is not just in a race to industrialise clean technologies such as wind turbines, batteries and solar panels (where China already dominates anyway); more consequential is the effort to develop the technologies, system capabilities and operating models that will define the next energy economy alongside them. That is where long-term economic advantage will lie and what should ultimately underpin confidence in climate delivery, providing hope for rapid emission reductions.

In the UK, energy innovation and industrial policy are being pulled into service of the Clean Power 2030 delivery mission. Rather than catalysing innovation, this approach risks locking the UK into uncompetitive industries and structurally higher power prices – undermining precisely the conditions that innovation requires. Expensive power weakens demand, deters experimentation and raises the cost of failure. It favours incumbents over challengers and turns energy policy into a mechanism for cost socialisation rather than technological progress.

The UK's preoccupation with Clean Power 2030 means energy policy is being treated as an industrial-strategy lever and higher electricity prices are being justified to create domestic supply chains. Examples include approving contracts for floating offshore wind far above competitive power prices and over-contracting capacity to provide investment certainty. While supply-chain resilience matters, relying on electricity consumers to subsidise high-cost deployment is a blunt and ultimately self-defeating tool.

In the emerging global energy order, leadership will not be defined by who deploys the most megawatts of today's technologies. Instead it will come down to who best shapes the systems, markets and technologies that determine performance, cost and scalability in the future.

That is where Britain's opportunity lies.

The country will not out-compete China in the mass manufacturing of wind turbines or batteries. But it can lead in the areas that underpin energy abundance: firm low-carbon power, system optimisation, digital-energy management, market design and frontier technologies that scale over decades, not election cycles. The UK's comparative advantage in this new energy age is not mass manufacturing or an abundance of natural resources, but intellectual capital, engineering depth and institutional capability.

This means prioritising innovation that is driven by performance and competition, not targets – innovation that lowers costs, improves system efficiency and expands optionality. Companies such as Octopus Energy have shown how software, data and new business models can unlock value in a renewables-heavy system – reducing costs, improving flexibility and accelerating adoption without relying on higher prices.

The same logic applies to nuclear technologies. The UK can lead by proving that nuclear power can be built cheaply and at scale – not by endlessly redesigning projects, but by implementing the recommendations of the Nuclear Regulatory Review:<sup>29</sup> streamlining approvals, enabling innovative financing models and building a credible Small Modular Reactor programme

in partnership with international allies.<sup>30</sup> Nuclear fusion, where the UK retains a globally significant scientific position and long-term strategic upside, should remain a core pillar of long-term energy strategy.<sup>31</sup>

Crucially, none of this innovation agenda is compatible with persistently high electricity prices. Technological progress flourishes in systems that are cheap, flexible and competitive. In an era of rapid technological change, cheap power is not a concession: it is the foundation of growth, experimentation and comparative advantage.

A cheaper-power objective does not compete with innovation, it enables it. By lowering system costs, expanding demand and restoring economic credibility, it creates the conditions in which the UK can deliver both climate impact and long-term prosperity – not by subsidising today’s technologies, but by building the energy system of tomorrow.

# Conclusion: The Choice Ahead

Clean Power 2030 has become an exercise in measuring the wrong achievements: it counts capacity, contracts and milestones but neglects affordability, system performance and political durability. In a country responsible for less than 1 per cent of global emissions, that is not climate leadership – it is climate theatre.

This is not to say that the UK needs less ambition. What it needs is a strategy that is grounded in today's reality.

Climate realism means accepting that decarbonisation succeeds only if it makes energy cheaper, not more expensive; if it strengthens economies, not weakens them; and if it earns public consent rather than exhausting it. A transition that raises electricity prices, hollows out industry and undermines competitiveness will not endure – and it will not be emulated.

There is also a harder truth. In a world where economic power, technological leadership and geopolitical influence are increasingly shaped by access to abundant, reliable energy, the UK cannot afford an energy strategy that locks in scarcity. Decline is not a climate strategy – and a weaker Britain will not be a more effective climate actor.

The choice facing policymakers is therefore not between climate ambition and economic strength, but between an energy strategy that accelerates decline and one that underpins renewal.

Clean Power 2030 is leading the UK in the wrong direction. Replacing it with a clear focus on cheaper, abundant power is the only way to sustain growth, enable electrification and maintain public consent for climate action.

# Endnotes

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## General enquiries

[info@institute.global](mailto:info@institute.global)

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