



Key messages

- The energy sector contributes around **£50.1bn in GVA annually** and sits at the heart of every part of the economy, providing the energy infrastructure, generation and supply needed to support households, businesses and public services¹.
- The sector is facing growing pressures from **higher financing costs, increasing regulatory complexity and supply chain constraints**, which are affecting investment decisions and slowing the pace of energy infrastructure delivery.
- **Government can support growth, energy security and decarbonisation** by tackling uncompetitive industrial energy costs, addressing specialist skills shortages, and creating a more stable investment environment for long-term capital deployment.

Table 1: Key business tax contribution figures for the energy industry²

	2024/25	2025/26	Difference
Business tax contribution	£14.23bn	£14.61bn	+2.7%
Tax contribution as a share of GVA	27.5%	29.6%	+2.1 ppt
Employers' NICs	£0.62bn	£0.76bn	+22.8%

Strategic importance

The energy sector is one of the UK's most strategically important industries, underpinning economic activity across every region and sector. It encompasses electricity generation, transmission and distribution, gas supply, energy retail, flexibility services, heat networks, energy infrastructure and emerging clean energy technologies.

The sector generated approximately £50.1bn in GVA in 2025 and supports around 143,300 direct jobs across generation, networks and supply³. Beyond its direct contribution, the sector supports a supply chain estimated to generate around four times the GVA of the sector itself, illustrating the central role energy plays in supporting economic activity across manufacturing, construction, transport, digital infrastructure and the wider economy⁴.

The sector is also central to the UK's long-term growth ambitions. Delivering Clean Power 2030 is expected to require between £200bn and £250bn of investment, while future energy scenarios suggest continued growth in renewable generation, storage, flexibility services, electric vehicle infrastructure and digital energy platforms⁵. The sector therefore sits at the heart of both the UK's economic resilience and the energy transition.

Growing cost pressures

Unlike many sectors, the energy industry is both a producer and purchaser of energy. The most significant cost pressures since 2019 have therefore come through increased commodity prices, financing costs and supply chain disruption rather than direct energy consumption.

Wholesale electricity and gas prices remain significantly above pre-pandemic levels. Electricity prices are still around 1.5-2 times higher than 2019 levels, while wholesale gas prices remain approximately 2-4 times higher than before the pandemic despite falling from the peaks experienced following Russia's invasion of Ukraine⁶. The resulting volatility has increased costs across generation, retail and infrastructure projects while also increasing financial risk across the sector.

Financing costs have also increased materially. The cost of debt for regulated assets has risen from around 2% during the low interest rate environment to around 5% under the current 'Revenue = Incentives + Innovation + Outputs' (RIIO) framework⁷. Rising hurdle rates have increased the cost of financing major infrastructure projects, contributing to delays, fewer bids in renewable energy auctions and the postponement of some investment decisions. Supply chain disruption has also increased component costs and delayed project delivery across the sector. Businesses report that projects which were previously commercially viable no longer meet investment thresholds under current financing conditions, with some renewable developments being delayed, scaled back or cancelled. The postponement of projects such as Hornsea 4 illustrates the challenges that higher borrowing and supply chain costs can create for capital-intensive clean energy

investments. The sector has also faced significant external pressures. The 2022 energy crisis created cashflow challenges for suppliers and generators, while high energy prices contributed to the growth of consumer debt. Energy UK estimates that energy debt now stands at approximately £5.5bn, adding around £50 annually to the average dual-fuel household bill⁸.

Improving the operating environment

The energy sector's contribution to growth depends on an operating environment that supports investment, infrastructure delivery and long-term planning. However, businesses report that several structural challenges are slowing deployment, increasing costs and affecting investor confidence.

1. Industrial electricity costs

The UK's energy transition depends on maintaining a competitive and affordable energy system for businesses. However, firms continue to face some of the highest electricity costs in the developed world, creating challenges for competitiveness and industrial growth. Industrial electricity prices remain nearly two-thirds higher than the median across International Energy Agency (IEA) countries, while medium-sized businesses face electricity prices around double the EU median⁹. As a result, high electricity costs are increasingly affecting investment decisions, reducing profitability, delaying capital expenditure in electrification and making it harder to justify investment in the UK relative to competing markets.

The impact extends far beyond energy-intensive industries. Around 90% of businesses report that their energy bills have increased over the past three years, while four in ten say they have reduced investment as a result¹⁰. Higher energy costs also feed through supply chains, increasing the price of goods and services and adding to wider inflationary pressures across the economy.

At the same time, addressing these challenges presents a significant economic opportunity. PwC analysis suggests that closing the UK's industrial electricity price gap with the G7 median could unlock up to £250bn in additional economic output over the next decade¹¹. Lower energy costs would strengthen the UK's attractiveness as a destination for investment, improve business competitiveness and support growth across both energy-intensive industries and the wider economy.

2. Skills, workforce development and apprenticeships

Delivering the UK's energy ambitions will require a substantial expansion of the workforce across generation, networks, supply chains and emerging clean energy technologies. While employment in the low-carbon and renewable energy economy has grown from around 205,000 full-time equivalent roles in 2019 to more than 300,000 today, businesses continue to report challenges accessing the specialist engineering, technical and construction skills needed to deliver projects at pace¹². Future job growth is heavily dependent on policy direction and the pace of investment and project delivery, making forecasting challenging.

Businesses have also raised concerns about the increasing cost of workforce development. The annual cost of employing an apprentice is expected to increase from £11,648 in 2024 to £14,560 in 2026, a rise of 25% over two years¹³. Energy UK reports that changes to the operation of the Apprenticeship Levy (now the Growth and Skills Levy in England) and associated funding arrangements are increasing the cost of training new entrants and preventing the upskilling of existing staff to higher levels of expertise, with some employers considering reducing apprentice intake as a result. Ensuring the skills system supports rather than constrains workforce growth will be essential to delivering long-term energy and industrial objectives.

3. Carbon pricing, market integration and the UK Emissions Trading Scheme (ETS)

Carbon pricing is a central component of the UK's decarbonisation framework, with the UK ETS influencing operational decisions and long-term investment across the power sector. However, businesses report that the interaction between carbon pricing, international trading

arrangements and wider decarbonisation policies is creating challenges for competitiveness and investment certainty.

A key concern is the reduced efficiency of cross-border electricity trading since the UK left the EU's Internal Energy Market (IEM). Businesses argue that the loss of more efficient market coupling arrangements has increased electricity system costs. These higher costs risk weakening the competitiveness of UK industry and reducing the attractiveness of the UK as a destination for investment.

Concerns have also been raised about the interaction between UK and EU carbon pricing frameworks. Under the EU's Carbon Border Adjustment Mechanism (CBAM), UK electricity exports are currently assigned a default emissions value of 0.43 tCO₂/MWh, despite the actual average carbon intensity of UK electricity generation being 0.124 tCO₂/MWh in 2024 and 0.126 tCO₂/MWh in 2025¹⁴. Businesses argue that this risks overstating the carbon content of UK electricity exports, reducing competitiveness in EU markets and creating an additional barrier to cross-border electricity trade.

Tackling the regulatory burden

The energy sector operates within one of the most complex regulatory environments in the UK economy, spanning consumer protection, environmental regulation, energy markets, network regulation, decarbonisation policy and infrastructure delivery. While regulation plays a critical role in protecting consumers and supporting the transition to net zero, businesses report that increasing regulatory complexity is adding costs, slowing decision-making and making it more difficult to deliver the scale of investment required across the energy system.

Businesses highlight that the burden is often driven not by individual regulations in isolation, but by the cumulative effect of overlapping requirements, lengthy governance processes and fragmented decision-making across multiple institutions. There are now more than 10,000 pages of energy industry codes, creating a significant administrative burden for businesses¹⁵. At the same time, concerns have been raised about the efficiency and cost of regulation, with Ofgem's headcount increasing by 120% and costs rising by 200% over a period in which the energy sector workforce grew by only 8%¹⁶.

The sector also argues that regulatory and institutional decisions can have significant real-world cost implications. Energy UK estimates that delays to anticipatory investment in network infrastructure added at least £2bn in costs during the energy crisis, while failures in the regulation of the retail market contributed to the collapse of around 30 energy suppliers between 2021 and 2022, adding a further £4.5bn in costs to billpayers¹⁷. Businesses therefore stress the importance of a regulatory framework that supports timely investment, reduces unnecessary complexity and enables delivery of the UK's long-term energy objectives.

Energy businesses engage with a wide range of regulations and enforcement bodies across government, including:

Department for Energy Security and Net Zero (DESNZ)	
Regulation	Regulator
Price cap: limits what suppliers can charge households on standard and default tariffs	Ofgem
Regulation of heat network	Ofgem
Financial Resilience and Control: prudential regulation on the retail market to ensure health of suppliers and eliminate moral hazard	Ofgem
UK ETS: adds a cost to carbon emissions to penalise carbon intensive behaviour, finance the transition and incentivise investment in clean energy	UK ETS Authority

Department for Environment, Food and Rural Affairs (DEFRA)	
Regulation	Regulator
Industrial Emissions Directive (IED)	Environment Agency (England), Natural Resources (Wales), Scottish Environment Protection Agency (SEPA) (Scotland)

Department for Transport (DfT)	
Regulation	Regulator
EV transition policies: Phase out of new petrol/diesel cars and vans by 2035 (Zero Emission Vehicles (ZEV) Mandate and Vehicle Emissions Trading Schemes)	Environment Agency (England), Natural Resources (Wales), Scottish Environment Protection Agency (SEPA) (Scotland)

Within this wider regulatory landscape, Energy UK has identified the following regulatory burdens as having a particularly significant impact on investment, infrastructure delivery and business costs.

1. Domestic retail price cap limiting innovation and smarter use of energy

Challenge: Limitations on pricing and tariff design are preventing the innovation essential for delivering the lowest cost to consumers. The price cap now covers over 50% of households, blocking dynamic pricing, time-of-use tariffs and bundled services that could reduce system costs by billions. The price cap has become the prevailing price point in the market rather than a simple safety net, creating a universal straitjacket preventing competitive differentiation and innovation.

Energy UK recommendation: Ofgem should publish a multi-year roadmap for the evolution of the price cap, specifying whether protection will narrow, transition to social tariff models, or remain universal, enabling suppliers to plan investment accordingly. Price protection must transition away from universal coverage to targeted support for those genuinely unable to engage or afford energy, with tariffs exempted where consumers opt in with informed consent.

Expected impact: A move away from the price cap for the majority of households would enable greater take-up of Time-of-use tariffs that preserve meaningful peak-to-off-peak differentials to create greater incentives for shifting demand. Combined with new dedicated light touch regulation (see below) it would incentivise retailers to offer more innovative bundled services that combine equipment and energy.

2. High regulatory burden on energy suppliers increasing costs

Challenge: Current regulations prescribe how suppliers must operate rather than focus on what consumers should receive, imposing costs that are paid for through higher bills while preventing innovation that would reduce costs, and result in savings for customers. Supply licence conditions specify required systems, governance structures, communication templates and procedural steps that suppliers must follow. They have grown by over one quarter since 2019, with new requirements regularly added but old ones rarely removed, even when they have been superseded or proven ineffective. Retailers are also called upon regularly to demonstrate their inputs and processes meet specific rules. Ofgem issued more than 280 'requests for information' where mandatory replies were required by a specific date in 2025 alone.

Energy UK recommendation: Government must provide a clear strategic direction that the aim of regulation should be to enable investment and innovation while maintaining essential consumer protection. There should be a comprehensive supply licence review, with a binding commitment to reduce regulatory burden. Sunset principles should be introduced so input-based obligations must justify their continuation rather than assuming persistence by default. Outcomes standards should be designed collaboratively with industry and consumer advocacy groups. Standards should be measurable, achievable and genuinely linked to consumer benefit. Regulation should apply to services, not business types, with a level playing field across all market participants offering each service. Light-touch licensing

for flexibility service providers, including suppliers acting in this capacity, should be finalised and introduced as soon as possible.

Expected impact: The economic impact of reducing regulatory burdens on suppliers could be substantial, as the cost of serving a customer in the UK is more than double the cost of serving a customer in France. If this was reduced suppliers could reduce the resources allocated to compliance functions spanning legal, risk, governance and reporting teams.

3. Issues securing planning consent for new energy infrastructure adding delay and cost

Challenge: The UK's planning system is not organised under a single entity, with England, Scotland, Wales, and Northern Ireland all having separate systems. There is overlap between some of these nations, as well as at least one lower-tier and higher-tier system for projects based on their significance. Projects in all areas lack binding statutory timelines. England's Nationally Significant Infrastructure Projects system aims to deliver projects within two years, yet the average has remained around four. With recent changes to the UK government's Planning and Infrastructure Act 2025 and the Welsh Government's Infrastructure (Wales) Act 2024, these are expected to be brought down further. However, these will not be sufficient to reduce times adequately, and further reforms can be made across all of the UK's planning systems.

Energy UK recommendation: Utilise the secondary legislation powers in the Planning and Infrastructure Act and potential new powers in the Energy Independence Bill to go further in addressing barriers at specific parts of the planning system. This should notably include pre-application processes, which are of particular concern in England and Scotland. While separate from the planning process to a certain extent, the environmental regulations for development need to be streamlined to deliver for both nature and developers alike, and are a critical area of reform. This includes the newly created Environmental Delivery Plans for England.

Expected impact: The fiscal benefits of reduced barriers in the planning system are very high, given their very low cost compared to their high economic benefit. However, it should also be noted that balancing the needs of local communities, developers, nature, and all other stakeholders has no 'right' solution, and will ultimately entail trade-offs and a flexible approach. Therefore, accurately measuring the impact of these reforms is likely to be complex.

Endnotes

¹ [GDP output approach – low-level aggregates - Office for National Statistics](#), SIC codes: Electricity, gas, steam and air conditioning supply: 35, Electricity power generation, transmission and distribution: 35.1, Gas; distribution of gaseous fuels through main, steam air and air conditioning: 35.2-3

² The CBI used its business tax contribution analysis in which we break down taxes by industry on a 2-digit SIC level. For employers' NICS we used the latest [ASHE](#) and [BRES datasets](#) to distribute ER NICs by industry. To estimate the contribution as a share of GVA, we used the latest [ONS GVA estimates by industry](#) to estimate the sectoral business tax contribution. Where it was not possible to assign the sector firmly to one or multiple 2-digit SICs, we asked TAs to provide data which we used and scaled accordingly. It should be noted that for some sectors there is a larger margin of error in the contribution statistics given 2-digit SICs do not necessarily fully align with the specific activities progressed in certain sectors. For the energy sector, we used SIC 35.

³ [GDP output approach – low-level aggregates - Office for National Statistics](#), SIC codes: Electricity, gas, steam and air conditioning supply: 35, Electricity power generation, transmission and distribution: 35.1, Gas; distribution of gaseous fuels through main, steam air and air conditioning: 35.2-3

⁴ [JOBS03: Employee jobs by industry - Office for National Statistics](#), [JOBS04: Self-employment jobs by industry - Office for National Statistics](#). SIC code: Electricity, gas, steam air and air conditioning supply: 35

⁵ CP2030 DESNZ – National Grid analysis, available at: [Clean Power 2030 Action Plan: A new era of clean electricity – main report - GOV.UK](#)

⁶ [Wholesale market indicators | Ofgem](#)

⁷ Table 1: <https://www.ofgem.gov.uk/sites/default/files/2025-12/RIIO-3-Final-Determinations-Finance-Annex.pdf>

⁸ Energy UK (2026), *Energy debt: Everyone pays*, available at: [Energy-UK Energy-Debt-Everyone-Pays_February-2026.pdf](#)

⁹ Department for Energy Security and Net Zero (DESNZ) (2025), *Industrial electricity prices in the IEA*, available at: [table_531.xlsx](#)

¹⁰ CBI (2025), *“Energy Costs an Anchor on Our Ambition”*, available at: [“Energy Costs an Anchor on Our Ambition”: CBI CEO | CBI](#)

¹¹ PwC (2026), *Powered up or priced out? The £250bn case for a national energy plan*, available at: [Powered up or priced out? The £250bn case for a national energy plan](#)

¹² [Low carbon and renewable energy economy estimates - Office for National Statistics](#)

¹³ CPS (2025), *“The Cost of Labour”*

¹⁴ [Commission Implementing Regulation \(EU\) 2025/2621 of 16 December 2025 laying down rules for the application of Regulation \(EU\) 2023/956 of the European Parliament and the Council as regards the establishment of default values – Annex 3](#), [Britain's Electricity Explained: 2024 Review | National Energy System Operator](#), [Analysis: UK renewables enjoy record year in 2025 – but gas power still rises - Carbon Brief](#)

¹⁵ Energy UK (2025) analysis, Ofgem (2025), *Energy codes*, available at: [Energy codes | Ofgem](#), Folger Shakespeare Library (2025), *Frequently asked questions about Shakespeare's works*, available at: [Frequently asked questions about Shakespeare's works | Folger Shakespeare Library](#)

¹⁶ Energy UK (2025) analysis, Ofgem (2025), *Ofgem Annual Report and Accounts 2024-25*, available at: [Annual reports and accounts | Ofgem](#), Ofgem (2015), *Ofgem Annual Report and Accounts 2014-15*, available at: [Annual reports and accounts | Ofgem](#), ONS (2025), *JOBS05: Workforce jobs by region and industry*, available at: [JOBS05: Workforce jobs by region and industry - Office for National Statistics](#)

¹⁷ Energy UK (2025) analysis, Citizens Advice (2021), *Market Meltdown: How regulatory failures landed us with a multi-billion pound bill*, available at: [Market Meltdown: How regulatory failures landed us with a multi-billion pound bill - Citizens Advice](#), NESO (2023), *Thermal Constraint Costs Data 22-23*, available at: [Thermal Constraint Costs Data 22-23 | National Energy System Operator](#), NESO (2023), *Constraint Breakdown 2021-2022*, *Constraint Breakdown 202-23*, available at: [Constraint Breakdown Costs and Volume | National Energy System Operator](#), Ofgem (2025), *Gas Prices: Day Ahead Contracts – Monthly Average (GB)*, available at: [Wholesale market indicators | Ofgem](#)