

BACKGROUND BRIEFING

Contracts for Difference AR8

The parameters of the eighth allocation round under the Government's Contracts for Difference (CfD) scheme for renewables technologies have been published. This includes the maximum prices that can be bid at auction and an indication of the overall budget. This briefing provides background information on the CfD scheme; the costs of renewable and gas generation; and information on energy security.

Key points:

- The Administrative Strike Prices (ASPs) announced for AR8 are the maximum bid prices that generators can put into the auction, and - historically - final strike prices successful at auction have been around 15-20% less than the ASPs.
- The CfD 'budget' is often misunderstood; it is not the annual costs for customers, but rather it is a 'worst case' annual cost, were wholesale prices to be very low.
- It is not accurate to compare CfD strike prices to current prices of electricity generated by gas, because CfDs are a 20-year stable price that factor in the costs of building new infrastructure whereas power prices today are a snapshot in time and do not factor in building new infrastructure. It's equivalent to comparing the costs of the fuel (gas) for an existing gas power station to building an entirely new windfarm and maintaining it over its lifetime.

What are CfDs?

- CfDs provide certainty for renewable investors, by providing a set 'strike' price that the generating company will receive. This certainty reduces their risk and financing costs, which in turn means lower costs. [Essentially, generators with CfDs receive a subsidy when the wholesale electricity price \(set by gas about 60% of the time today\) is low, but pay back consumers when the electricity price is high \(ECIU, 2025\).](#)
- As the subsidies or repayments depend on the wholesale electricity price, only projections can be made about the future costs of CfDs. However, the Government stated that during the gas crisis [CfDs reduced the average household bill by £18 \(DESNZ, 2024\).](#)
- Early investment in UK renewables has resulted in [renewables providing around half of the UK's electricity in 2025 and in the first quarter of 2026 reached a new record of 53%,](#) driven by record wind output. (Carbon Brief, 2026) (DESNZ, 2026)
- The CfD 'budget' is often misunderstood; it is not the annual costs for customers, but rather it is a 'worst case' annual cost, were wholesale prices to be very low. Wholesale ['reference prices' used to generate the budget have been criticised](#) for being lower than plausible wholesale price forecasts, potentially resulting in

the 'budget' seeming higher than the actual costs that customers are ever likely to pay (Regen, 2024).

Impact of renewables on bills

- The single largest component of household electricity bills is the wholesale electricity price. In July 2026, the [wholesale price makes up around 40%](#) of the typical annual household electricity bill and high wholesale gas prices accounted for [over 80% of the £155 increase in bills due to uncertainty from the US-Iran war](#). (Ofgem, 2026) (ECIU, 2026)
- In 2025, UK [wind power lowered the day-ahead wholesale power price by around a third](#), or £38/MWh, by replacing generation from older, less efficient gas power plants. This effect will increase with the rollout of more renewables (ECIU, 2026).
- As well as this impact, some research suggests that renewables lowering demand for gas decreases the gas price from what it would otherwise be, [saving the UK over £100bn since 2010](#) (UCL, 2025).
- Older subsidy schemes like the Renewables Obligation (RO) historically cost more than CfDs, because they funded earlier renewables when they were more expensive to build. The RO worked to lower costs, e.g. developing and running an offshore wind plant over its lifetime costs around [50% less in 2020 than it was in 2010](#). However, RO contracts are now expiring and subsidies for this scheme will peak this year or next and fall thereafter. The [Government recently changed which measure of inflation](#) the RO scheme is linked to, so that generators under the scheme should get paid less interest because of inflation (Carbon Brief, 2023) (DESNZ, 2026).
- The UK currently relies mainly on gas-fired power plants to 'back up' its renewable electricity generation, which are generally switched on only during periods of high (or 'peak') electricity demand. The costs of providing back-up power for when demand could exceed supply accounted for just 7% of household electricity bills in 2025, according to the [National Energy System Operator](#) (NESO). The [NESO](#) also expects the reduction in wholesale electricity prices from renewables to more than offset any increase in these balancing costs (NESO, 2026).

Costs of gas generation

- It is not accurate to compare CfD strike prices to current prices of electricity generated by gas, because CfDs are a 20-year stable price that factor in the costs of building new infrastructure whereas power prices today are a snapshot in time and do not factor in building new infrastructure. It's equivalent to comparing the costs of the fuel (gas) for an existing gas power station to building an entirely new windfarm and maintaining it over its lifetime.
- [Wood Mackenzie has found](#) that in the US, gas turbines, the most expensive single component of a new gas plant at 20-30% of the plant cost, are under severe supply pressure. In April 2026, gas turbine prices were expected to reach

about US\$600/kW by the end of 2027, a 195% increase since 2019 (Wood Mackenzie, 2026).

- A recent UK Energy Research Council study found that two-thirds of the increase in electricity bills over the crisis were due to wholesale gas prices increases (UKERC, 2026)
- There has been some form of carbon pricing on UK electricity since 2001. Currently, these are the UK Emissions Trading Scheme (ETS) and the Carbon Price Support (CPS). The Government recently announced that the CPS is being scrapped from April 2028. Combined, today the ETS and CPS account for around £45/MWh price on gas generation, although the ETS price changes as dictated by the market whereas the CPS is a flat rate (£18/tonne CO₂ emitted). The revenue is collected by the Treasury and used for public spending. If the ETS were removed from UK electricity generation, the Treasury would get billions less in income every year, and under new EU rules brought in to protect industry from dirtier imports, there would be an increased cost to EU electricity importers that might make UK imports less attractive, reducing revenue overall (Energy UK 2026)
- The UK uses a "marginal cost pricing system" to determine the wholesale electricity price, which means that the wholesale price reflects the running cost of the most expensive power plant needed to meet demand – this is gas 60% of the time. This is the highest proportion of any EU country and largely explains why electricity prices rise when gas prices do (DESNZ, 2026).
- Industry experts forecast that wholesale electricity prices will fall as renewable power generation capacity increases. Real-world examples also make clear the impact on displacing gas-fired power generation with renewables: wholesale electricity prices in Spain – where renewables provide more power than gas – are much lower than prices in Italy, where gas provides more power than renewables. (Cornwall Insight, 2024), (Ember, 2026).

Impact of renewables on energy security

- The North Sea is running out; between 1999 and 2023, oil and gas production has fallen by 72% and further falls are expected whether or not there are new licenses granted for exploration. This is particularly the case for gas, as around 70% of reserves left in the North Sea are oil; in the last 15 or so years, hundreds of new licensing rounds have delivered just 16 day's worth of gas. (DESNZ, 2025), (NSTA, 2024), (Uplift, 2025).
- Unless the UK starts to reduce its demand for gas by adopting net zero technologies (e.g. installing more renewables and electric heat pumps), our import dependency will rise. It is expected that the UK will increasingly import more Liquefied Natural Gas (LNG) from places like the US and Qatar to replace falling North Sea production, although the majority of gas imports currently come via pipeline from Norway.