POLICY OPTIONS

ONE

Maximising private investment and competition in clean energy through reforms to renewable energy financing

- Set Contracts for Difference (CfD) auction budgets to ensure competition between projects.
- Move to a 'deemed' CfD model.
- Exempt power purchase agreements (PPAs) from the CfD Supplier Obligation Levy and reform Renewable Energy Guarantees of Origin (REGO) certificates.

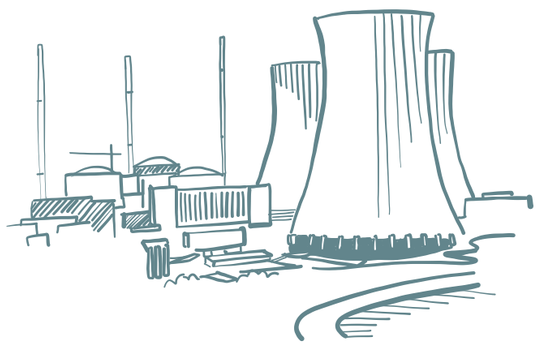
Contracts for Difference (CfDs) are one of the Conservatives' biggest legacies of the last 14 years. Introduced by the Conservative-led government in 2014, they incentivise private investment in low-carbon electricity generation at a lower cost to the consumer. They are a mechanism for de-risking investment, giving investors certainty over future returns from clean energy, and have been vital in the rollout of clean energy in the UK. With CfDs, generators in renewable technologies such as wind, tidal, and solar can stabilise their revenues at a pre-agreed fixed price for each MWh of electricity they generate (the strike price). When the market price for electricity is below the strike price, the generator is paid; when the price is above the strike price, the generator pays back the difference.

Crucially, CfDs have reduced the cost of capital for renewables by reducing risk. Whilst they have no marginal cost as there is no fuel, renewables are capital-intensive. Fifty-seven per cent of the cost of offshore wind, for example, is capital spending[25]. By increasing investor confidence, CfDs have lowered the overall price[26] of clean energy.

There have been six auctions, or 'allocation rounds', to date, which have seen a range of different renewable technologies competing directly against each other for a contract. Since 2014[27], the CfD scheme has mobilised £54 billion[28] of investments in around 30 gigawatts of clean energy generation (including nuclear). In 2022, CfD projects generated enough energy to power 7 million[29] homes.

CfDs have enabled private finance to deliver the vast majority of the energy transition while lowering the cost of capital and encouraging competition to drive down energy costs. Their success demonstrates why public financing through GB Energy is not necessary to deliver the energy transition.

Annual CfD auctions ensure a stable pipeline of renewable projects that will require components from the supply chain, supporting jobs and investment in regional economies, and therefore retaining them is crucial. However, the budgets for CfDs need to be set such that the auction remains genuinely competitive, which is key to keeping costs down[30]. The government's proposed reforms[31] for the next CfD auction risk decreasing



the competitiveness of future auctions and pushing up prices. To continually increase budgets, so every project clears the auction, will result in a slew of renewable projects that are of poor value for money for billpayers. As CfDs are paid for through levies on electricity bills for 15 years, minimising the strike price will keep consumers' bills down. Moreover, building renewables too fast before expanding the transmission network will result in more wasted power due to constraint payments. Competitive CfD auctions will help deliver the energy transition while keeping prices down for billpayers.

It is important to acknowledge that CfD auctions are not technology-neutral, do not take account of the systems costs of renewables, and shift risk from developers to billpayers, so they are sub-optimal from a free market standpoint. In order to reduce state intervention in the energy market, reforms to the CfD model should be explored.

The last government proposed a deemed-based CfD model in its 2024 Review of Electricity Market Arrangements (REMA) consultation[32] – aimed at reforming the country's electricity market to support its transition to renewable energy generation. In the current model, generators are paid based on the energy they actually produce. In a deemed-based CfD model, generators are paid based on their potential to generate in a particular time period, not how much they actually generate. This requires generators to operate on merchant terms, selling energy into the market, therefore being more exposed to market forces and being required to optimise trading strategies. This model could also reduce the need for constraint payments, which cost taxpayers nearly a billion[33] pounds last year and are set to grow.

The long-term ambition should be to transition away from a government subsidy model to an entirely market-led approach, particularly for lower risk, smaller-scale projects. This could be partially achieved through the expansion of the power purchase agreement (PPA) market, which operates without government intervention whilst offering long-term price stability for developers. PPAs are long-term contracts between an electricity generator and a customer, and have seen a resurgence in the United States as 'big tech' seeks to invest in nuclear power[34] to power data centres. Extending the use of PPAs could support the development not only of renewables, but also of flexibility[35] technologies, such as battery storage, and nuclear power.

To facilitate the expansion of PPAs, there are a number of options that could be considered. Firstly, exempting new PPAs from CfD Supplier Obligations[36] should be explored as a method of reducing the cost of electricity generated through PPAs. This levy currently undermines the business case for corporates to sign PPAs. Another would be to reform the current system of Renewable Energy Guarantees of Origin (REGO) certificates, which enable some companies to claim, often incorrectly, that they are using 100% clean power, while doing very little to support additional private investment in renewables.