Briefing – An introduction to the CfD and its role in the energy bill crisis
5 September 2022

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Intro – Contracts for Difference (CfD) and the 'green levy'

With energy bills already high and set to climb even further, there has been considerable focus on all aspects of what consumers pay, including the so-called 'green levy'. Closer examination of this element reveals it to actually be a collection of different social and environmental payments, but it is most closely associated in most people's minds with schemes to support renewable energy, made up of:

- the Feed-In Tariff (FIT, aimed at smaller installations such as rooftop solar);
- the Renewables Obligation (RO, an older system to support larger scale renewables); and
- the Contract for Difference (CfD) – the only open and growing scheme, the other two having been closed to new generation some years ago.

Taking the cost of most of these schemes into general taxation, either temporarily or permanently, would relieve bill payers of 5% of current bills, a proportion that will fall as the size of bills rises, since these are basically fixed costs – approximately £152/year for a typical customer, with the RO and FIT making up near £100 of that figure. **However, taking the CfD away would result in higher bills due to the design of the scheme.**

What is the CfD and how does it work?

The CfD was introduced under the Coalition Government to promote low-carbon forms of generation. It is a private law contract between a generator and the Low Carbon Contracts Company (LCCC), which is owned by Government, under which the generator's income per unit of electricity is fixed. This is done by committing to pay or be paid a *difference payment*, which is calculated by comparing a *reference price*, which is measure of the market price for electricity, and the generator's *strike price*, which was set for most projects by an auction and varies project to project. If the reference price is below the strike price, LCCC pays the generator the difference, with the money coming from a levy placed on electricity suppliers. When the strike price is below the reference price, the generator pays LCCC the difference and the money is channeled back to suppliers.

For 'intermittent' generators like offshore wind projects, which constitute most of the CfD portfolio, the reference price is set for each hour and is based on the results of auctions for power held the day ahead of generation. This is referred to as the Intermittent Market Reference Price (IMRP). For 'baseload' generators, which generally have a fuel and can be controlled, the reference price is set for six-month periods based on traded forward contracts for power supply, with the difference payment for each unit fixed over that period. The graph below illustrates difference payments for intermittent generators.
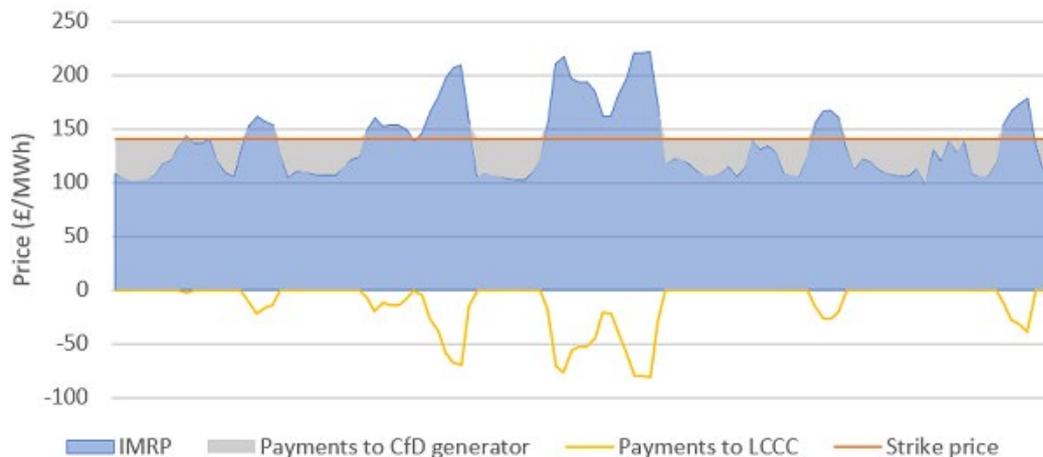
Figure 1. CfD payment mechanism for an intermittent generator

Source: LCCC

How has the CfD been working in the current market?

For most of the time that the CfD has been operating, reference prices have been below the strike prices of projects, and LCCC has been levying suppliers to fund difference payments to generators. In September 2021, however, market prices rose to the point where, over the whole CfD portfolio, generators were paying back to LCCC. Given this situation, the levy on suppliers was set to zero and has remained there since. LCCC pays the accumulated surplus from generators to suppliers at the end of each quarter.

Over the last quarter of 2021 and the first quarter of 2022, nearly £275m was received from generators and returned to suppliers. In the second quarter of 2022, however, day-ahead prices were lower and LCCC had to take £43.6m from suppliers. So far in Q3, LCCC has accumulated £120m in payments from generators and this should continue to rise so that there is another substantial payment at the end of this quarter.

Once LCCC has paid the surplus to suppliers, it is up to them as to how that cash is used, but it should have mitigated the bill rises we have seen since last year to a small extent.

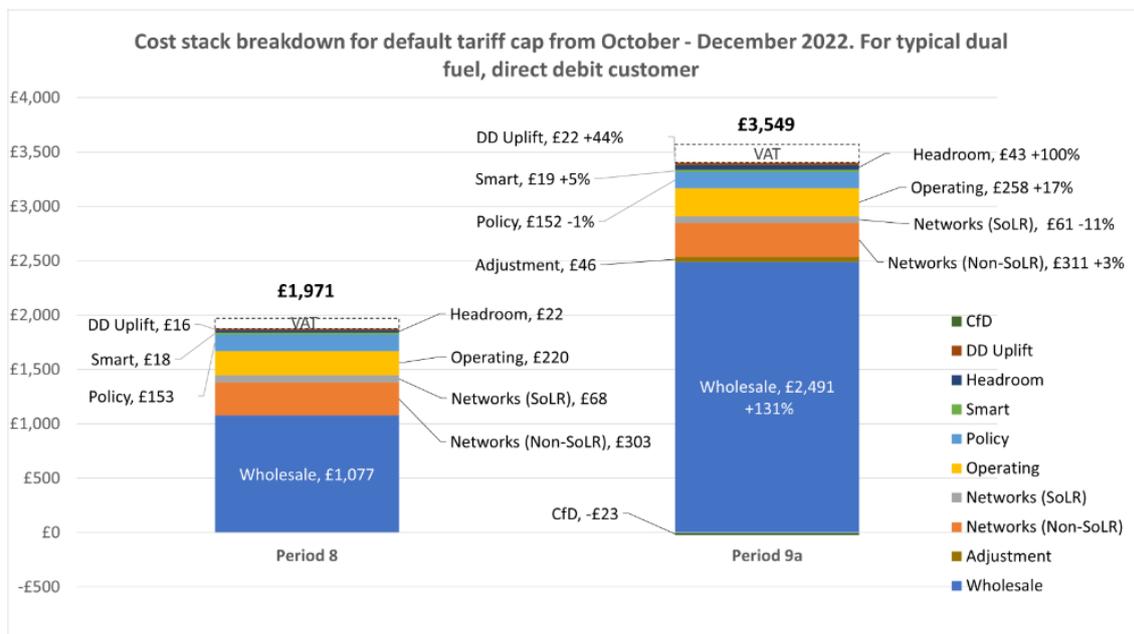## How does the CfD contribute to the Ofgem price cap?

LCCC works closely with Ofgem to ensure the benefit of the CfD is reflected in the 'cost stack' used by the regulator to calculate where the cap should be set. This is complicated by the difficulty in forecasting day-ahead prices, shown by what happened in Q2 of this year, when an unexpected glut of Liquified Natural Gas arriving in the UK depressed short-term gas and therefore power prices. LCCC's forecasts are based on traded forward prices in the market, which are both very volatile and trading at a premium to the actual day-ahead prices because of the risks involved. Due to this effect, our published forecasts are likely to overestimate the actual income received from generators.

When calculating the price cap for the last quarter of 2022, Ofgem used the forecast for CfD income that LCCC made in June, when setting the parameters for the CfD in that quarter. At that time we forecast an income of £730m for the quarter. That has translated into a *reduction* in the price cap of £23 for the typical bill payer – see the breakdown below. At the moment LCCC is forecasting a much larger income for the quarter, but it is difficult to say with any certainty what the payback to suppliers will actually be. LCCC will continue to work closely with Ofgem to ensure the effect of the CfD on mitigating electricity price rises is included as accurately as possible in the cap calculation.

4. Breakdown of costs in the energy price cap

Dual fuel customer paying by direct debit, typical energy use (GB £)

Source: Ofgem