Insights: 3 lessons learnt from market reform

October, 2020

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Looking back, it's hard to believe that it was ten years ago that the then Department of Energy and Climate Change (DECC) undertook its Energy Market Assessment, which recommended Electricity Market Reform.

At my first meeting with Jonathan Brearley, to work out whether DECC could deliver the policy in time for a second session Energy Bill (we did – it became an Act in 2013), it was clear that despite all the urgent issues that needed addressing, controlling the scope of EMR was key to delivering it by the end of 2014. (That and writing a White Paper in 3 months!)

Now, five years on from the first allocations, the Contract for Difference (CfD) and the Capacity Market (CM) remain key tools in the decarbonisation of GB electricity.

Time to reflect on what we have learnt, and what it means for Net Zero and the next phase of reforms needed to deliver it.

1. Set ambitious goals

From the outset, EMR was framed as the plan for tackling the 'trilemma' of decarbonisation, security of supply and affordability. Back then, renewables were only 4% of generation and CfDs in particular were aimed at attracting the £110bn infrastructure investment required to meet the UK's 2020 renewables target at a lower cost of capital than before.

As CfD Counterparty, LCCC has seen CfDs attract a wider range of investors, earlier in the development cycle, on the back of the certainty that private law contracts provide. Cost of capital and technology costs have come down – and thanks to competitive auctions, costs to consumers have also come down.

Electricity produced by low carbon generators with CfDs is forecast to account for around a third of total electricity generation by the mid-2020s, avoiding some 16 MtCO2/year. This may seem like a huge achievement, but it's only the first stepping-stone on the path to becoming an electricity sector that can play its full role in decarbonising the economy. I sometimes reflect that EMR opened up the race but didn't leave instructions on how to re-set the finishing line.

"My advice would be to design for the end-game, create resilient structures and resource for continuous change"

2. Expect reform to change things!

It sounds obvious, but when you start changing things, your reference case changes too.

I'm sure I'm not the only person from the EMR team who was pleasantly surprised at the pace at which offshore wind came down the cost curve. The 2013 EMR Delivery Plan had the cost of offshore wind commissioning in 2018/19 cautiously estimated at £140/MWh and the industry taskforce identified £100/MWh by 2020 as being achievable.

Industry turned out to be right about costs, which continued to reduce further, with last year's auctions for offshore wind commissioning in 2023/24 achieving sub-£40/MWh. This was largely down to the speed of scale-up, with ever-larger turbine sizes enabling lower capex and opex.

The 2013 Delivery Plan also estimated that offshore wind could provide around a third of electricity generation by 2020. What we have seen is slower deployment, yet the steady increase in offshore wind capacity has still depressed wholesale electricity prices in what is often termed the 'cannibalisation effect', making business cases harder for unsubsidised renewables.

Some commentators have flagged these developments as triggers for the 'next phase'. It is clear that EMR was the start of a long journey to decarbonisation, and evolving it to adapt to the changing reference case is an essential and ongoing requirement. There have certainly never been two years with the same rules under the Capacity Market! Whilst political timescales often result in trade-offs on scope, my advice to policy-makers would be to set a clear long-term outcomes, create resilient structures, and resource continuous change to get to where you want to be.

3. Apply what you have learnt

Some aspects of CfD design were 'borrowed' from the Renewables Obligation (RO) process, for example, our Fuel Monitoring, Sampling and Sustainability (FMS) process. Where best practice exists, it's important to build on this and focus policy energy on the 'new bits'.

Alongside the introduction of a private law contract, the CfD Supplier Obligation levy was another 'new bit' put in place as a result of lessons learnt on the RO, which suppliers found hard to forecast and budget for as a single lump sum once a year. Our forecasting has been challenged by the impacts of Covid-19 on demand, but the predictability of the levy process is valuable for suppliers and in Ofgem's price cap setting process. The levy is key to the financial robustness of LCCC and therefore the investability of the CfD itself.

In the same way that RO lessons learnt informed the design of the CfD, what we have learnt from this first phase of the CfD and CM can inform further market evolution.

Conclusion…?

With the Net Zero challenge, it is now vitally important to move to the next phase of the decarbonisation challenge. EMR was not perfect – it didn't design whole system outcomes or deal with the network reforms required for increased renewable deployment – but it was an important first step, and a successful one in terms of bringing forward new sources of investment.

I started off talking about scope, because there is always a trade-off between getting something done quickly versus taking a holistic approach. A holistic approach is, by definition, more efficient, but will also take more time to have an impact. The pace of EMR was driven by a pragmatic delivery focus of "what can we achieve in the time we have". I believe Net Zero requires the same discipline, and an acceptance that perfect shouldn't be the enemy of good. However, it also requires coherence across strategies and transparency about the pace required.

There are many different ways to reach the end goal but the only answer we know to be wrong is not to act fast enough.

About this series…

This Insights series is aimed at drawing out and sharing what we have learnt from how the CfD and CM schemes are currently operating to enable the energy sector to play its role in achieving UK Net Zero by 2050.

This will include topics such as how CfDs have attracted investment into renewables, developers' success in delivering CfD projects, and why we believe the CfD is good value for money.

My hope is that our insights will be valuable to those familiar with our schemes, as well as informing other sectors or jurisdictions looking at lessons from the GB electricity market.