The Case for Sectoral Low Carbon Investment Contracts

|Trident |Economics

September 2020

The 2030 Climate Target Plan recently released by the European Commission proposes stricter targets for EU CO2 emissions to place the EU on a pathway to decarbonisation by 2050. Tighter targets are welcome, however the intent to focus on the EU Emissions Trading Scheme (EU ETS) as the primary driver to achieve these is open to question. It may be that each sector will need an equivalent of the low carbon incentives used in the power sector if a rapid and efficient transition of EU industry is to be achieved. Such an approach could also avoid the need to implement a carbon border adjustment in the face of opposition from trade partners.

The Weaknesses of the EU ETS as an Investment Driver

The EU 2030 Climate Target Plan is very positive on the success of the EU ETS to date:

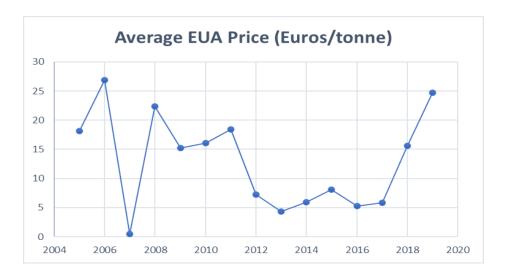
"The EU Emissions Trading System (ETS) has proven to be an effective tool in reducing greenhouse gas emissions. Emissions from stationary sources declined by 33% between 2005 and 2018. With carbon prices increasing, following the introduction of the Market Stability Reserve and the market anticipating the impact of the reinforcement of the system, these emissions saw a further drop by almost 9% year on year in 2019.

Other policies, most notably renewable energy and energy efficiency policies, have contributed to the reductions in power sector emissions. However, it is clear that when the carbon price is sufficiently robust, it becomes a strong driver for immediate change (e.g. change of fuel used for electricity generation), and a strong signal for low carbon investments, and thus contributes decisively to the deployment of renewable energy and energy efficiency technologies."

The EU ETS undoubtedly provides a strong operational price signal regarding fuel consumption in the power sector, particularly the use of natural gas rather than coal if the daily CO2 price (the value of an EU Allowance, or EUA) is high enough. Power generators are able to trade EUAs on a liquid market and therefore know exactly what carbon price to factor into operational decisions. Increasing carbon prices have also been an effective tool in driving closure decisions for coal-fired power stations, if a power station is uneconomic at current CO2 prices, and prices are unlikely to fall in future, then the power station will shut.

The potential weakness of reliance on the EU ETS is in the case of long-term investments in low carbon technologies that are dependent on a particular future value of CO2 for viability. Experience in presenting investment appraisals in large corporations indicates that a frequent and important question is consistency between assumed future conditions and previous experience. Looking at the previous experience of EUA prices, this would not be helpful in defending robust carbon price

assumptions for the future, especially if the investment requires a material increase in carbon prices to be viable.



The EU, in contrast to the statements made in the 2030 Climate Target Plan, has previously accepted residual market failure within the EU ETS as grounds for State Aid to low carbon investments in power generation. Presumably, the introduction of the Market Stability Reserve (MSR) is perceived to have rectified this and the MSR has been helpful in strengthening EUA prices. However, from an investors perspective this rather confirms the dependence of future CO2 prices on administered decisions, which makes predicting a carbon price level from fundamental assumptions pretty much impossible.

The substantial progress made in low carbon power generation investment across the EU has not been achieved through investors reacting to potential future CO2 prices, it has been delivered by long term contracts or incentive arrangements. The advantages of long-term contracts in lowering the financing cost for new low carbon generation investments was confirmed in the assessment of the introduction of contracts for differences by the UK Government.

Potential Lessons for Other Sectors

The EU ETS provides useful short-term signals that can reflect a value of avoided CO2 emissions into operational decisions. The knowledge that a carbon price will exist will also have some influence on strategy and investment decisions, however uncertainty regarding the future cost of CO2 may limit investments into lower carbon industrial production technologies. Recognising the success of the various incentive schemes for low carbon power generation, long term low carbon industrial production contracts should be considered that reward producers for bettering benchmark emissions intensity levels. If the cost of low carbon production incentives was recovered from a carbon intensity based sales tax on goods then this would influence efficient consumer decisions and would avoid the need for a carbon border adjustment.

The potential advantages would be:

- Lowering the cost of low carbon industrial investment and hence accelerating decarbonisation whilst limiting the costs borne by consumers.
- Enabling long term signals regarding the future value of avoided CO2 emissions to be provided by the EU in the profile of CO2 values included in the contracts.
- Avoiding the need for a carbon border adjustment mechanism with the multiple complexities
 of this, including issues with trade partners and potential distortions to trade if there is a
 lagged adjustment of border tariffs to rapidly changing EUA prices.