

Introduction

In the Autumn statement in 2011 the Government announced plans to introduce a “Carbon Floor Price” mechanism beginning in April 2013.

This short briefing explains what a carbon floor price is and why the UK Government believes it is needed. It also highlights some concerns and briefly explores alternative options.

The Government is seeking to create the right conditions to decarbonise the British economy, however, the challenge is to grow the sustainable energy sector whilst being mindful of the impact of policy interventions on energy prices and economic competitiveness. Whilst it is very important that prices for carbon are increased from their current low level, the decision to introduce a carbon floor price in the UK carries considerable risk and it is questionable whether it will meet this challenge.

What is the UK carbon floor price and why is it needed?

Since 2005 Emissions of greenhouse gases have been subject to regulation under a market based mechanism known as the EU Emission Trading Scheme (ETS). This European wide policy regulates roughly half of all emissions in the EU. A finite number of allowances¹ to emit are created and distributed. Participating installations must then surrender allowances to match the emissions they produce. Those who can cheaply and easily reduce their emissions can sell spare allowances to those who find it harder or more expensive to do so. The balance of supply and demand for allowances creates a traded price for carbon.

At present, because there are too many allowances available in the market compared to the demand, prices are relatively low – the EU market price is not expected to climb far above £4/tCO₂e over the next three years². As the White Paper on Electricity Market Reform puts it “the carbon price resulting from this cap has not been stable, certain or high enough to encourage sufficient investment in low-carbon electricity generation in the UK”³. In this context ‘sufficient’ means compatible with Britain’s commitments under the Climate Change Act to achieve emissions reductions of 80% by 2050 relative to 1990 levels.

About Sandbag

Sandbag is a UK based not-for-profit organisation campaigning for environmentally effective carbon markets and focusing on the EU Emissions Trading System.

Our campaigns are supported by in-house research monitoring the environmental robustness of the caps, the distribution of allowances, and how key sectors, installations and companies in the scheme are affected by it.

For more information visit our website at www.sandbag.org.uk or email us at info@sandbag.org.uk

¹ Allowance = European Unit Allowance (EUA).

² Based on prices taken from The ICE and exchange rates taken from Google on 26/3/201

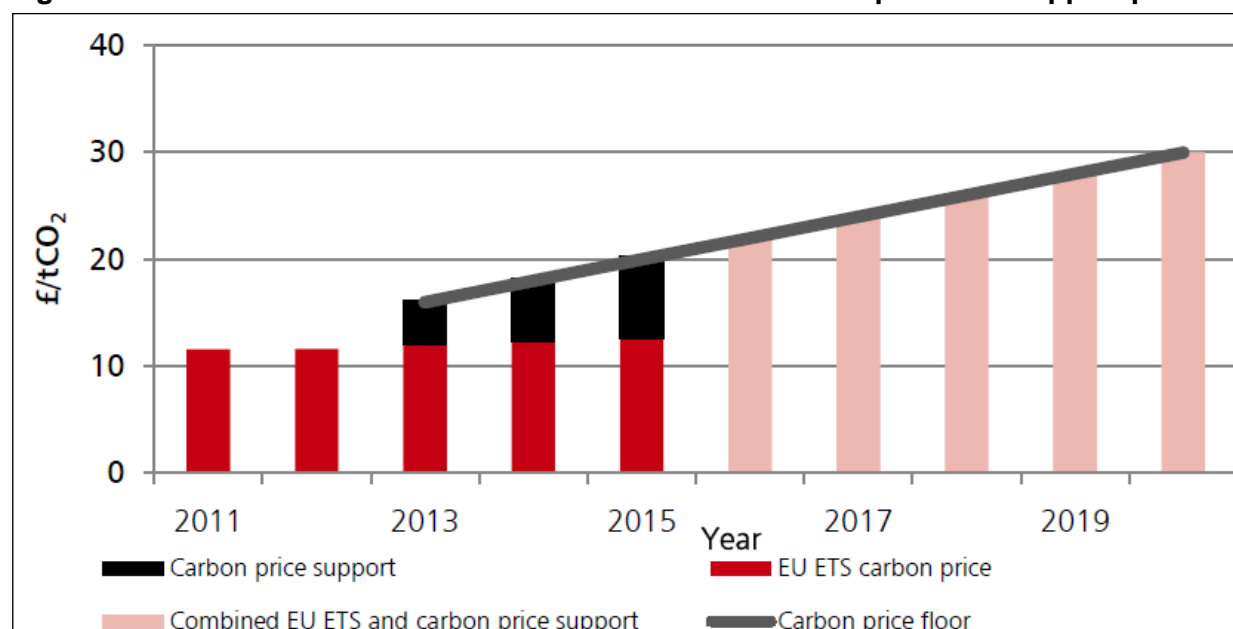
³ DECC, *Planning our electric future: a White Paper for secure, affordable and low-carbon electricity*, July 2011, <http://www.decc.gov.uk/assets/decc/11/policy-legislation/emr/2176-emr-white-paper.pdf>, [Accessed 12 March 2012].

How will it work?

In order to provide the robust and reliable incentive that the ETS is so-far failing to deliver, the government has established a minimum price that British electricity generators will pay for carbon allowances. Starting from £15.70 in 2013, this minimum price steadily escalates by roughly £2/year until it reaches £30 in 2020. From there it starts climbing by £4/year until it reaches £70 by 2030. All prices are set at 2009 levels.

The government imposes this “carbon floor price” on electricity generators by charging a “carbon price support” on top of the ETS carbon price. Each budget statement the Treasury calculates what the inflation adjusted target price will be two years ahead, compares this with an futures price for ETS allowances two years ahead, and derives a carbon price support to bridge the gap between them.⁴

Figure 1: Carbon Price Floor broken down into indicative ETS price and support price⁵



In 2011 the carbon price support for 2013 was calculated at £4.94; in 2012 the carbon price support for 2014 was calculated at £9.55; and the most recent budget set the 2015 carbon price support at £18.08.⁶

The floor price is levied via the existing Climate Change Levy, which was a downstream tax on energy use rather than a direct upstream tax on greenhouse gas pollution. The additional sums required to meet the floor price are levied at the point of sale of fossil fuels based on their emissions factors. This means they are paid by the suppliers of coal and gas sold into the electricity market. Oil suppliers did not pay the Climate Change Levy (CCL) since they were already taxed under fuel taxation policies. Because this charge was higher than the CCL they were able to claim a rebate to take the level of fuel tax down to the equivalent level of the CCL.

⁴ HM Treasury, *Carbon price floor consultation: the Government response*, March 2011, http://www.hm-treasury.gov.uk/d/carbon_price_floor_consultation_govt_response.pdf, [Accessed 19 March 2013].

⁵ *ibid*

⁶ HM Treasury, *Budget 2013* http://cdn.hm-treasury.gov.uk/budget2013_complete.pdf

Under the new system the rebate is reduced so less money may be claimed back keeping it in line with the new higher rates due under the carbon floor price policy.

As the market price for EU carbon allowances has continued to falter, the price support needed to reach the floor price has continued to grow, almost doubling each successive year. The day before the 2015 price support was announced at £18.08, the 2015 futures price settled at £3.26⁷, implying UK energy generators will face carbon costs six times higher than their European counterparts. This poses an interesting dilemma for Treasury as it will result in more revenue than it might otherwise expect from the EU ETS, but imposes greater cost on British industry compared to our European competitors.

The Government has proposed to compensate manufacturing sectors that might be competitively disadvantaged by higher electricity costs under the ETS and the Carbon Floor Price, pledging a support package worth £250m over the spending review period (next 2-3 years). The detail of these policies remains to be finalised, and will also require EU clearance under state aid rules before being implemented.

Evaluating the Government's policy

The key question is whether the extra cost the carbon floor price places on British industry and consumers is justified in terms of stimulating investment in UK energy infrastructure and as an effective means of reducing emissions. Starting as it does in 2013, before any significant volumes of new low-carbon capacity can be installed, the carbon floor price will initially serve to generate windfalls to companies with pre-existing low-carbon capacity, including nuclear power which makes up the majority. These windfalls accrue because the wholesale electricity price charged by all generators is increased as a result of the fossil fuel generators paying the carbon price and low-carbon generators benefit from this increase in price for their product without paying anything out. In this way, the carbon floor price further rewards investors whose decisions had already been justified by the market conditions before the policy was introduced. On this basis, some lobby groups have argued that the policy may be illegal under EU State Aid Rules.

Will it secure investment?

The main problem with the carbon floor price is one of political risk. As the carbon price support to reach the target is only announced two-years in advance, in the annual Finance Bill there is no long-term certainty of what it will be. More importantly, the further the UK carbon price deviates from the price paid in the rest of Europe, the more criticism the policy is likely to attract increasing the risk that government will freeze the escalator or otherwise row back from the policy.

The carbon floor price is also a relatively imprecise tool in terms of securing investment compared to other policy options that have either been implemented or proposed. The Renewables Obligation, for example, provides a strong incentive to invest in new renewable capacity with financial feedback mechanisms that reward those who build new capacity to meet their obligations at the expense of those companies who do not. The proposed auctioning of fixed price contracts (contracts for difference or 'CfDs') for new low carbon power capacity included in the Governments Electricity Market Reform package are also targeted at securing new investment in projects. Crucially, under these policies monies are only received once new capacity is up and running.

⁷ EUA Dec 2015 settlement price on ICE was €3.81 for 18/3/2013. Exchange rate from Google 19/3/2013

Will it have an environmental impact?

The UK's floor price will hopefully reduce the carbon intensity of the UK's energy system, however, it will not reduce the overall amount of CO₂ being emitted in Europe. The overall number of carbon allowances allocated across Europe via the emissions trading scheme (ETS) determines the maximum level of pollution allowed. Simply changing the price at a national level does nothing to alter this. While national price rises should encourage more abatement to take place within the UK, this national abatement simply increase the share of carbon allowances available to the rest of Europe at a lower cost.

Were other large emitters were to follow the UK's lead and adopt national Carbon Floor Price policies to meet their domestic climate goals, these problems would simply be exacerbated. We would see a fragmentation of EU climate policy with no net environmental benefit.

The only way to ensure net emissions reductions within the EU ETS is to tighten the carbon budgets set by the scheme. It is incredibly important that a UK carbon floor price does not become a substitute for environmental reform of the EU Emissions Trading Scheme as a whole.

What effects will the carbon floor price have on Industry and consumers?

The carbon floor price will set the UK apart from other EU Member States, with IHS Cera estimating that wholesale electricity prices will increase by 10-15% under the policy in 2015.⁸ While the energy intensive sectors deemed at risk of carbon leakage are likely to be compensated, other energy consumers such as households and SMEs are likely to face the full brunt of these costs.

How much money will it raise and where will the money go?

The Treasury estimates that it will raise £900 in 2013, this could double in 2014 and double again in 2015, totalling some £4-5bn over the next three years, depending on overall levels of demand for electricity and the proportion of fossil fuels used to generate it. The Treasury is strongly opposed to hypothecation of tax receipts so the money raised will simply enter the public accounts, however, part of the revenue (£250m over the next 2 years) will be used to compensate energy intensive industries for the impact of increased power bills. There are no plans to introduce new compensations for consumers and existing energy efficiency policies either raise bills further (ECO, Warm Home Discount) or require consumers to pay for improvements via a loan paid back through their utility bills (Green Deal).

The importance of EU action

The UK's carbon floor price is a direct intervention to help shore up investment decisions in the UK. A better way to support prices and provide stronger investment incentives would be to reduce the supply of allowances in the EU ETS.

⁸http://www.energyglobal.com/news/coal/articles/UK_carbon_tax_will_balloon_under_current_proposals_IHS_CERA.aspx

This would be best achieved at an EU level where discussions are currently underway to do precisely that. The European Commission is in the middle of a stakeholder consultation on structural measures to reform the EU ETS.⁹ This follows on from its first official carbon market report where it outlined several options by which the volume of allowances might be reduced.

A Commission proposal to hold back allowances from auction over the next three years is about to be voted on in the European Parliament. This measure would help support the market price of carbon over the next few years, and would help to usher in the aforementioned structural reforms. While the UK government has officially come out in support of this measure, but it remains unclear whether British MEPs will back the government's position

While action at EU level is ideal, these structural reforms are not guaranteed to happen, and may take some time to achieve. In the meantime, the UK should explore options to support the market

price of carbon by for example incentivising voluntary cancellation of allowances and unilaterally withholding allowances from auctions or, better still, by partnering with other large Member States such as Germany and France to do this on a larger scale. This would reduce the overall supply and boost the unit price, potentially with no net loss of income if the price rises sufficiently to compensate for the reduction in number of allowances sold.

Conclusion

There is a very real need to increase investment in low carbon infrastructure in the UK in order to achieve our commitments under the Climate Change Act.. Carbon pricing can be an efficient way of incentivising this investment, however, to avoid competitiveness distortions and the fragmentation of European climate policy, this is best achieved through action at the EU level.

The Carbon Price Support policy provides excessive windfalls to existing operators without guaranteeing new investment in capacity and does not secure additional emissions reductions. Continued unilateral intervention in the UK and sustained low carbon prices in Europe will amplify the competitive distortions it introduces. These features make it politically vulnerable and this vulnerability is aggravated by the formal announcement of the Carbon Price Support in each year's budget. Similar tax escalators such as Fuel Duty and Alcohol Duty have previously been frozen in whole or in part.

The only sustainable way of boosting the UK carbon price is to raise it across the EU. The Government should therefore aggressively pursue structural reforms to the EU ETS, or partner with other high-emitting Member States to explore withholding or incentivising cancellation of allowances multi-laterally.

⁹ http://ec.europa.eu/clima/policies/ets/reform/index_en.htm