The ETS & the Energy Efficiency Directive

Introduction

This briefing for members of the Industry, Research and Energy committee concerns the draft Energy Efficiency Directive, and how it relates to the EU Emissions Trading System (ETS). It summarises our latest research and contains specific recommendations.

In summary, Sandbag finds the EU ETS requires urgent intervention to reduce the supply of emissions allowances and prevent it from becoming a counterproductive policy, and finds such intervention justified independently of any increase in Europe’s 2020 ambitions. Around 1.4bn allowances need to be removed in order to restore the balance of supply and demand in the system. This should be achieved by both an immediate set-aside of allowances and a change to the annual reduction factor. The Energy Efficiency Directive is an appropriate legislative platform to reduce the supply of pollution permits in the ETS, both because the ETS is an instrument explicitly designed to drive cost-effective energy efficiency, and because new policies in the directive threaten to exacerbate the oversupply of carbon permits currently suppressing the carbon price. There are already approximately 700Mt more allowances in the system than are needed to cover emissions to 2020. The new directive is likely to add around 400-700Mt more. Without intervention, the EU ETS will actively defer abatement by storing up emission reductions delivered by the recession, and will increase Europe’s long-term abatement costs by failing to drive timely investment in low-carbon infrastructure.

To fix the Emissions Trading System, we therefore support:

1. Rapidly setting aside approximately 1.4 billion tonnes from Phase 3 auctions to align the ETS with the new economic context.

2. Steepening the long-term ETS trajectory from 2013 both to better align it with Europe’s 2050 targets for the covered sectors and as a first move to permanently cancel any permits set aside as above.

We believe both of these solutions are needed to make the ETS fit for purpose and discuss each in further detail below:

Recommendation 1: Set aside carbon permits to correct for the effects of recession

The Commission originally proposed a set aside of approximately 1.4 billion permits from Phase 3 auctions would be needed to prepare the ETS for a 30% 2020 target; however Sandbag’s research finds that a set aside of similar scale is needed purely to counteract the effects of overallocation and the recession within Europe’s current levels of ambition for the traded sector in 2020.

1 Deutsche Bank foresees a gap to cap of 663Mt. See EU Emissions Scoping the Cap over Phase 3 (13/2/2012)

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
Current ETS targets imply an ETS budget of 1,777Mt in the year 2020 (excluding aviation), which is roughly 21% below the 2005 emissions for the traded sector. Regrettably, the carbon budgets set along the way to that target have consistently been set too high. In Phase 1, this oversupply caused the price of carbon to collapse to zero. The recession would have had a similar effect on the Phase 2 carbon market but for new rules allowing carbon allowances to be banked forward to future Phases. While this saved the scheme from immediate embarrassment, it has created a legacy of oversupply for Phase 3 and possibly beyond, which threatens to depress the carbon price for many years to come.

The recession reduced emissions across all sectors in the ETS; however, a widespread policy of awarding industrial sectors generous free allocations left them with vast surpluses of allowances. Our research finds industrial sectors stand to amass 855 million superfluous carbon permits over Phase 2, most of which will ultimately be banked forward into the next trading period, weakening the price signal and delaying low-carbon investment. Our research also shows that this oversupply in the Phase 2 cap effectively raised the starting point from which the Phase 3 budgets were calculated, thereby adding a further 490 million permits to Phase 3. Together, the direct and indirect effects of Phase 2 surpluses needlessly inflate Phase 3 cap by 1.3 billion permits, unnecessarily weakening the contribution of the ETS towards Europe’s existing 2020 targets (see Figure 1 below):

![Figure 1: direct and indirect oversupply resulting from recession](image)

Allowances set aside from Phase 3 to correct for the new business-as-usual emissions outlook should ultimately be cancelled so as to prevent them returning to reduce abatement obligations and depress prices in the scheme. It would also be possible to use the set-aside to create a strategic reserve of allowances which would help to guard against the potential for high prices. Allowances would be released from this reserve only if the price reached a pre-determined level, e.g. €40/tonne. Annex I of this briefing contains a brief description of just such a mechanism as it appears in the Californian Emissions Trading System set to begin in 2013.

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4 Commission decision 2010/634/EU
5 This figure is taken from Buckle Up! (July, 2011) [www.sandbag.org.uk/site_media/pdfs/reports/Sandbag_2011-07_buckleup.pdf](www.sandbag.org.uk/site_media/pdfs/reports/Sandbag_2011-07_buckleup.pdf)
6 This is a slightly different calculation to that given in Buckle Up. It assumes that the current baseline is lowered by 171Mt (855Mt/5) but follows a gentler trajectory (1.03%) to meet the 1,777Mt ETS cap currently implied by Commission decision 2010/634/EU for 2020
**Recommendation 2: The need for long term trajectory change to the EU ETS**

The annual linear reduction factor of 1.74% that currently defines the trajectory of the ETS over Phase 3 and beyond represents the rate of reduction needed to attain the given target for the scheme in 2020. The 2020 target of a 21% reduction against 2005 levels represented what was deemed appropriate for the traded sector to contribute towards Europe’s economy-wide pledges compared to business-as-usual projections. The effect of the recession coupled with new policies such as the EED has been to significantly change this Business as usual projection making targets far easier and cheaper to reach.

The current trajectory reduces traded sector emissions to only 70% below 2005 levels by 2050 a figure which is incompatible with the milestones and targets outlined in the Commission’s 2050 Roadmap for a Low-Carbon European economy. We therefore recommend redrawing the trajectory with a view to delivering reductions in-line with the Roadmap.

- A stronger linear adjustment factor would better align the ETS with Europe’s longer term climate ambitions for the relevant sectors and give greater long term clarity to investors.

- It would also serve to *permanently* remove 300- 400 million permits from the Phase 3 budget. We recommend that this withdrawal of permits should not be additional to the 1.4 billion proposed set aside, but could be a mechanism that begins to cancel them.

- The increased linear reduction would lower the official ETS budget for 2020, allowing for either a step up in Europe’s 2020 climate targets, or creating breathing space for the non-traded sectors of the economy to meet their targets.

**Our response to those objecting to ETS reform**

Concerns have been voiced in some quarters that proposed adjustments to the supply of carbon permits in the ETS represent inappropriate/undue “market interference”, and indeed such concerns have been raised by some ITRE MEPs as specific amendments to the draft Energy Efficiency Directive. Sandbag recognizes that some MEPs are concerned that setting a precedent of political interference in the market might introduce an unacceptable level of political risk which might deter investment in the traded sectors, but such concerns need to be placed in perspective: the ETS is not a true market but an artificial construct that is currently unique in having a fluctuating demand but a fixed supply. Normal markets dynamically adjust both demand and supply. In addition, because the ETS cap is *already* failing to drive the kind of low-carbon investment it was designed to attract, intervention is justified to bolster confidence in investors in the low carbon economy. Furthermore, as Deutsche Bank has recently pointed out, even the low carbon price we currently see is being artificially sustained by the market’s expectation of a political intervention, and will fall further if this possibility recedes.⁷

It should not be forgotten that that the current supply of ETS carbon permits is the artefact of a political calculation of what was a feasible shortage of emissions reductions to impose against business-as-usual emissions in the traded sector in order to meet Europe’s current 2020 climate targets. Those 2020 targets in turn were based on a separate political calculation of what was feasible for Europe to contribute in the international political context.

The Phase 2 caps (2008-2012) were set in consultation with Member states and the Phase 3 cap and long term ETS trajectory were established in 2008. Both of these pieces of legislation established a forward supply of carbon permits on the false presumption of a strong underlying economy.

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⁷ Deutsche Bank, "What is the value of a political option?" (29th November 2011)
It is important to recognise that there are already supply-side controls in the ETS directive to *increase* the supply of permits under the cap in the event of the ETS price tripling over a 6 month period\(^8\), but there are not parallel policies to reduce the supply if the prices rapidly decrease in the way we have seen. This represents an imbalance in the legislation, which also already provides generous access to international offsets to soften the costs of compliance.

Finally, if no intervention is forthcoming at an EU level, it is likely that Member States seeking to secure investment in low carbon infrastructure will introduce their own unilateral measures to bolster the carbon price as is already the case in the UK. This splintering of carbon policy is not good for the internal market and further undermines the effectiveness of the EU ETS mechanism.

**Concluding remarks**

The need for intervention to reduce the supply of allowances in the ETS is now widely acknowledged, and even very coal and gas reliant energy companies like E.ON, Enel, CEZ and Shell have joined the chorus of voices calling for the scheme to be fixed. The ENVI committee has supported similar proposals to those outlined here, both in its capacity as Committee for the Opinion on the draft Energy Efficiency Directive, and also in its own-initiative Report on the 2050 Low Carbon Roadmap.

While the above proposals represent our preferred options for amending the EU ETS via the Energy Efficiency Directive, other options for ETS reform are available, however, whatever form of action is taken it should be taken sooner rather than later.

As we have demonstrated, a *variety* of interventions, alone or in combination, could help restore the environmental integrity of the EU ETS and the price signal it delivers to investors. While Sandbag would ultimately prefer a permanent recalibration of the scheme that better reflects historical oversupply and future climate targets, what is most urgent is that the ITRE committee gives the Commission a clear general mandate to significantly adjust the supply in Phase 3, ensuring the next eight years of European climate policy are not wasted.

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\(^8\) Article 29a of the ETS Directive 2003/87/EC
Annex I: The Californian set-aside model

The Californian cap-and-trade legislation provides an interesting precedent on how to prevent any set aside of permits from returning to depress the carbon price: the Allowance Price Containment Reserve. This is effectively a set-aside written into the policy from the outset, and amounts to 7% of the total allowances in their third trading period (2018-2020).

Permits in this set aside, are not priced by the market, but are instead given a fixed annual price that escalates predictably over the course of the scheme. The reserve is divided equally into three different price tiers. In 2013 these prices will be $40, $45 and $50 and will rise a further 5% (plus inflation) each year reaching $56, $63 and $70 in 2020. Any permits not sold from the reserve each year are banked forward into the next year’s reserve.

The fixed prices for the reserve are set above the anticipated market price for the bulk of carbon allowances, but act as a safety valve if the market price abruptly rises. As we have seen, by setting aside permits from auction, it also helping to protect against price crashes. Were the 7% set aside applied in Phase 3 of the Californian scheme applied to the ETS, it would amount to over a billion permits.

The Californian scheme also has one additional protection against price crashes that the EU currently lacks, namely, a minimum reserve price for permits sold into the general market. When there are no bids above $10 for permits sold at auction, the permits are withdrawn and added to the Allowance Price Containment Reserve.

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9 This Appendix summarises one section of our dedicated briefing on the Californian ETS, which can be found at: http://www.sandbag.org.uk/site_media/pdfs/reports/California_set_aside_briefing.pdf


11 Phase 3 ETS budget is 15,265Mt, an APCR would set aside 7% or 1,069Mt

12 http://www.arb.ca.gov/cc/capandtrade/meetings/121409/pdr.pdf p.72