

EU ETS reform – SSE’s view

The EU Emissions Trading Scheme (ETS) was created to cap carbon emissions within the traded sectors. It was also expected to incentivise lowest cost low-carbon behaviours by letting market forces discover the price of the lowest cost abatement measures.

Under its existing design, the EU ETS is successful at capping the emissions of the traded sectors. However, it fails to provide a robust and stable carbon price signal for investors to move towards low-carbon behaviours and technologies due to much lower than predicted demand for allowances. This has in turn created a significant surplus which, without intervention, will allow the EU to delay urgent action on climate change, putting Europe on a more costly long-term path to meet its decarbonisation targets.

This ‘backloading of effort’ could lock-in unnecessary high carbon investments and deter low carbon and energy efficiency investments, harming the long term affordability of energy for European consumers.

Summary of SSE’s view on EU ETS reform

- 1) **Backload 900 million allowances to prevent surplus getting worse**
- 2) **Align the EU ETS Linear reduction factor with agreed targets as part of the 2030 Climate and Energy Package**
- 3) **Introduce a Supply Adjustment Mechanism (SAM) to link supply to the demand for allowances – Needs to be held away from market**
- 4) **Deal with the surplus – backloaded allowances can be cancelled or added to a surplus reserve**

Why the EU ETS need reform?

The ETS is an artificial market, and requires carefully designed parameters if it is to truly mimic the behaviour of a ‘natural market’. At present, these parameters are misaligned, and as a result the ETS is not behaving as predicted. In particular, a huge surplus of 2 billion allowances has been allowed to build up since 2008 which has flooded the market with allowances. This surplus is now a structural burden upon the market until such time as it is used up – a process which might take decades.

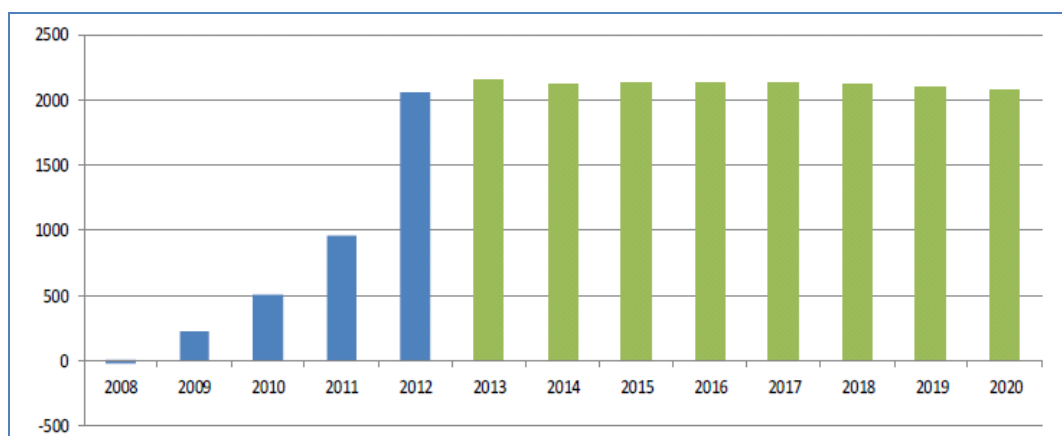


Figure 1. ETS allowance surplus (European Commission, 2013)

Specifically this surplus has been caused by two structural flaws facing the EU ETS. If the ETS is to be the cornerstone of European climate mitigation by providing a smooth pathway to meet 2050 targets, these structural flaws need to be addressed. If only the symptom is addressed, but not the cause, then the symptom will likely return. The structural flaws with the EU ETS are:

- **No link between supply and demand of allowances**

The fundamental issue faced by the ETS is the absolute fixed nature of the cap. Unlike almost any other market, the volume of allowances supplied responds neither to changes in price or demand. The ETS has a vertical “*supply curve*”, and a near-vertical (but unpredictable) “*demand curve*”. With this dynamic, prices are inherently unstable; and ultimately it is highly likely that either:

- Supply of allowances are higher than underlying demand, regardless of price; and so prices sink to very low nominal levels (“option value” only).
- Supply of allowances are lower than underlying demand – potentially sending the market price to distress levels once sensible short-run abatement opportunities are exhausted.

This volatility increases political risk for investors, as it increases the likelihood of unilateral member state interventions as they try to provide certainty for low carbon investors and underwrite national budgets. Ultimately, if abatement is not undertaken smoothly over the coming years, the ETS price could spike to unsustainable levels, undermining political support for climate change mitigation and damaging certainty for investors.

- **Annual linear reduction factor not aligned to 2030 and 2050 targets**

Currently the linear reduction factor does not align with expected carbon emissions target with 2030 and the target for 2050. Whilst the idea of capping emissions via an ETS is sound, if the amount of available allowances does not match with the cap, then there is an obvious problem.

How should the ETS be reformed?

There appears to be wide support for reform of the ETS. However there is little agreement on what steps reform of the ETS should include.

Until there is consensus around an agreed pathway for real long term structural reform of the ETS, the debates and the political risk will continue to hamper confidence in the scheme as the main European driver of climate change mitigation. A clear pathway and consensus support will give investors certainty of the long-term viability of the ETS.

To fix the noted structural problems and to address the symptoms of these, SSE would propose the following 4 step pathway:

Step 1) Backloading of 900 million allowances to prevent surplus getting worse

This buys the EU time to address the structural problems of the EU ETS. SSE is pleased to see that a conclusion appears close.

Step 2) Align the EU ETS linear reduction factor with agreed targets as part of the 2030 Climate and Energy Package

In SSE's view it is entirely logical for the current linear reduction factor to align with proposed long term expectation for the traded sectors. However, there is a challenge over how to apportion

economy wide targets to the traded sectors equitably. There should be a long term aim to incorporate as many sectors as possible into the ETS, if not making it economy wide.

As a minimum, an ETS target for traded sectors should align with the carbon target agreed in the 2030 Climate and Energy Package. If the ETS was economy wide it would be entirely sensible to align it to 2050. However, even for the current traded sectors under the ETS, the linear reduction factor should have a view of 2050.

Step 3) Introduce a Supply Adjustment Mechanism (SAM) to link supply to the demand of allowances – Needs to be held away from market

In SSE's view this is the most important intervention to ensure the ETS provides a stable and robust carbon price. A Supply Adjustment Mechanism (SAM) would allow the supply of allowances to respond to the demand. Any allowances deemed surplus to the requirement of the market would be placed into a strategic reserve. At times of market stress, the allowances in the strategic reserve could be released – though never exceeding the overall cap – to provide some relief to the market.

Introducing a SAM would stabilise the ETS price ensuring a smooth pathway to decarbonising the European economy, ensuring the ETS price doesn't bottom out or, conversely, spike in a way that might put public and political support for decarbonisation at risk.

It is positive that the Commission is looking at bringing forward proposals for a SAM. How the mechanism works in detail is discussed later in this paper, and SSE views that the critical point is that the strategic reserve is held far enough away from the market to not be seen as an easily accessible extension of the market. If this is not fully accounted for it would negate the value of a SAM.

Step 4) Once you have fixed the leak – deal with the surplus

Once the structural reform of the EU ETS takes place, there will still be over 2 billion surplus allowances on the registry. Over time the increase in the linear reduction factor and SAM would eventually restore the market to balance. However, the impact would not be felt for over a decade.

In SSE's view there needs to be an additional one-off intervention to deal with the surplus in the short term. There are two options: 1) A permanent set aside; or 2) Put surplus allowances – including the 900m backloaded allowances – straight into the strategic reserve when a SAM is introduced.

Detail on a Supply Adjustment Mechanism (SAM)

A Supply Adjustment Mechanism – in whatever form – needs to be managed by a set of clear and pre-defined rules that provide the market with visibility of any changes to supply of allowances in the market. This will allow market participants to purchase allowances efficiently and will avoid the risk of one-off interventions in the market. As such, there would be little requirement for a managing organisation other than a body to hold the surplus reserve.

How to withhold allowances – Target float

Allowances should be withdrawn from auction when the surplus on the register exceeds a certain amount. The amount withdrawn would be calculated annually by reference to the ETS registry. This calculation should recognise that the market requires a certain amount of liquidity to function – a target float. This can be calculated by looking at the generation and hedging strategies of emitters. We believe that the target float would currently be equivalent to around seven months' worth of consumption, but would taper off across Phase 3. We propose that all allowances above this threshold would be removed from future auctions and placed in the strategic reserve.

How to return allowances – Return must have additional barrier: Two options

The return of allowances to market could – as some others have suggested – be achieved through a volume based mechanism. However, we believe that **in order to be effective, the return must have and additional barrier through some reference to the price of allowances**. A volume-only trigger for return would encourage traders to think of the reserve as 'available when they need it' and would do very little to change existing pricing practice. In light of this, we have outlined two alternative options for return:

- **Continuous premium payment option:**

The surplus reserve could be made permanently available to the market as a 'hanging reserve'. In other words, when the withdrawal is triggered, allowances remain available to the market at auction, but can only be sold at a specified premium. This solution avoids the complex issues associated with managing the return of allowances – the speed and quantity of allowances returned, and the design of a trigger for return.

However, if it is to function properly, it must establish a valid 'premium price' for the resale of these allowances to market. As an example, this could be set at the average price over the last six months plus a premium (either fixed or a percentage cost). This would mean that in a rising market, some relief could be provided to emitters (depending on the level of the premium required) while in a shrinking market the emissions in the hanging reserve would be unattractive.

- **Locked volume return:**

Alternatively, the reserve could remain 'locked'. Any access to the allowances in the reserve would require the market to pass a trigger point, and to establish clear timetables and quantities for allowances to be returned to the market. The trigger could be a price shock in the same spirit as the existing Art 29A of the ETS Directive, which allows the Commission to enhance auctions of allowances under a clearly defined set of circumstances. Under this model, there is no 'return price' – additional allowances are added to the normal auctioning schedule, but the availability of extra allowances is strictly limited.