ETG Ad-hoc group on Market Stability Reserve (MSR)

Discussion Paper - April 2014

Introductory statement

This discussion paper records the differing views of the UK ETG ad-hoc group which was asked to assess the merits of the Commission's proposal for a Market Stability Reserve (MSR) which was released as part of the '2030 package' on 22nd January 2014. As this paper records the views of organisations which represent different sectors, companies or organisations it may appear that some statements are contradictory, however it is not the intention to record a consensus but merely to document what different actors see as the advantages and disadvantages of the MSR and to identify any outstanding questions about its aims, function and implementation.

At the ETG WG ETS meeting (8/4/14) the working group asked that the following points were given additional prominence in the discussion paper:

Firstly, that the biggest variable in Phase 3 for supply and demand is EU ETS installation emissions. May 2014 will see year 1 of phase 3 EUETS installation emissions published; for the first time the effect of new sectors, gases, installation activity definitions (e.g. combustion plant) will be available together with 2013 emissions from incumbent installations. Participants need to see from the Commission a new and transparent supply demand balance forecast out to 2030 using 2013 data before deciding on any response to surplus

Secondly, MSR is an additional complexity to the EU ETS. As such there must be very good structural reasons for deploying it to justify the market distortion. It is important to note that the EUA market has demonstrated its ability to absorb surplus and still function well.

'Stated' Aim of the MSR

- Deal with structural imbalance between supply and demand
- Deal with part of the ~2bn surplus
- Deal with the expected continued imbalance
- Designed for a 'large scale event'
- Future proof against influences such as fuel prices, economic cycles, weather, use of international credits
- Make the backloading type adjustment recurring
- Complement other changes e.g. linear reduction factor

What MSR won't do

- It won't change the cap
- It won't permanently retire allowances
- It won't change the amount of free allocation to installations designated as vulnerable to carbon leakage
- It won't affect aviation allowances

MSR Features (technical)

- MSR is determined by the total number of allowances in circulation (total published in May each year)
- Volume based removal: From 2021 (Year X), based on the data published the year before, relating to verified emissions in the previous year (X-2), 12% of the total number of allowances in circulation may be placed in the reserve (if ≥100 million allowances)
- **Volume based return:** If total number in circulation is <400million then 100 million are released.
- Carbon price trigger: If for >6 consecutive months the carbon price is >3 times the average price in the preceding two years [100million??] allowances will be released from the reserve
- 833 million allowances = maximum surplus that does not result in removal of allowances to the reserve
- 400 million allowances = minimum surplus that that does not result in the removal of allowances to the reserve.
- 400 million allowances = maximum surplus that can result in allowances being released from the reserve
- Reserve carried forward to later periods and auction smoothing at phase transition
- MSR is determined by the total number of allowances in circulation: defined as the
 difference between all allowances issued and international credits used since 1 January 2008
 until the end of each year, and verified emissions recorded since 2008 and allowances in the
 reserve at the end of that same year
- Total number of allowances in circulation in year x = total number of allowances issued from 2008 to year x + total number of international credits used from 2008 to year x - total emissions from 2008 to year x - number of allowances in the market stability reserve in year x.
- The MSR does not include details of timing in Year X for removing or returning allowances.

MSR Features (political)

- The final thresholds, conditions and amounts will be decided up front by EU decision makers when this proposal is agreed by the Council and the European Parliament.
- Review required by 2026 (with particular focus on the reserve parameters).

Advantages of the MSR as proposed

- The MSR is better than full cancellation because cancellation would encourage emission reduction at higher cost, whereas ETS with MSR the absolute total volume remains unchanged though unusable in the market except at very low levels of surplus / liquidity.
- MSR leaves free allocation amounts unchanged
- The MSR allows for growth fluctuations by smoothing the price signal reducing supply in times of surplus, and increasing in times of growth induced demand.
- The proposal seems to be automated/rules-based in approach and hopefully not susceptible to (too much) political meddling (except for the 'By 2026' review clause)
- The proposal includes a mechanism for minimising 'price runaway' and price collapse (albeit not perfect)
- The proposal provides for a moveable 'price collar' but without an explicit reference to price so for those participants that do not support a price reference the price collar might be more acceptable than a price reference.

- The proposal does not include external governance e.g. a central carbon bank to manage the
 market, but the Commission has to make an analysis by 2026, and consider the reserve fill
 volume percentage.
- The reserve may transit between phases.
- The MSR proposal reduces further uncertainty over alternative interventions by proposing implementation from 2021.

Disadvantages of the MSR as proposed

- As proposed it will not resolve issue of surplus that has built up over phase 2 and 3 immediately, the historic surplus is reduced over time.
- The MSR was not explicitly one of the six options presented in the *state of the European carbon market in 2012* report. It has therefore not undergone the same level of stakeholder engagement and scrutiny. However, it could be argued that it is a variation on Option F 'Discretionary Price Management Mechanisms'.
- The MSR is an intervention when there is still the option of letting the market continue to function so that the cap reduction reflected in the linear adjustment factor gradually removes allowances from the system.
- The MSR extinguishes the principle of 'abatement or compliance at lowest cost' because as a
 market intervention its aim is to increase EUA price by restricting supply (albeit temporarily).
 Any EUA price increase as a result of the MSR would therefore mean that compliance or
 abatement would not come at least cost.
- The MSR legislative proposal does not contain any additional features to minimise potential carbon leakage impacts of the intention to increase price by restricting circulation.
- The implementation of the MSR could impact on the attractiveness of the EU ETS to link to other schemes.
- The MSR proposals amount to building a surplus of allowances which can then be released into the market when there is a constraint i.e. EUAs are not cancelled and the system doesn't have a supply side adjustment mechanism
- It is difficult to predict what impact it will have on price as the underlying supply and demand balance remains unchanged but it is expected that the price be higher by more than if the MSR proposal was not deployed all
- The only difference between this proposal and the current market arrangements is that currently the market participants hold the surplus and going forward the surplus will be held in an official reserve.
- There is an asymmetry between the amount removed (a percentage) and the amount returned (a fixed volume).
- There is a time lag between removal of allowance and return. This may increase volatility. The time lag is different (and unspecified) for the 'volume related' withdrawal and return and the 'price related' withdrawal and return.
- Potential increased market volatility due to new and repeated 'market events'. By reducing the supply of allowances available for auctioning, given that almost all of the current surplus is held by installations, and that allowances have to be surrendered for compliance each year, there is a risk that the market becomes more not less volatile.
- There is a perceived difference between the long term and near term effects of the MSR e.g. at near term lower prices the possibility that the price-linked release of allowances will be triggered is more likely than later when prices are higher. This could increase the near term volatility compared to the longer term.
- The proposal provides for a moveable 'price collar' without explicit reference to price. It is therefore less visible/transparent than a price reference.

- The MSR does not differentiate between origins of the EUAs in circulation. The Commission report estimated that "without international credits, the surplus in the EU ETS by 2020 would potentially be only around a quarter (25%) of the presently expected surplus". Whilst it is unclear whether the MSR has been designed to deal with the current surplus or manage future fluctuations in demand, it does appear that the MSR has been designed to a magnitude (the amount of removal and return) of external influence that may not be present post 2020 (because CER conversion is only currently allowable to 2020).
- With international linking the demand for, supply of, and *use* of emission rights in other economies could affect the actual circulation of EUAs, without this being reflected in the simple calculation defining the circulation in the proposal. This could result in the MSR operating in ways that it is not intended to operate. A potential solution for this would be to expand the definition of "circulation" to reflect demand in linked systems but the advantages and disadvantages of this are outside the scope of this paper.
- The MSR proposes 400m EUA as the lower level of market functioning but the proposed recycling of 100m per annum is potentially too small because of the potential influence of large forward contract purchasing on liquidity. As an example the EU ETS emission of the largest single emitting entity (a power generator) in 2012 were around 160mtCO₂. Therefore, 400m EUA is 2.5 years emission of the largest emitter.

Outstanding questions about the MSR function and aims

- Calculating the amount in circulation. The calculation includes a reference to 'international
 credits used'. This raises a question about whether this should mean 'entitlement to use'
 which may be greater than actual number used at any point.
- The mechanism for moving auction volumes at the end of the phase is not simple in concept and indeed it would rely on the Commission 'estimating' future auction volumes. How would this work in practice? (especially in light of how unsmooth the transition between phase 2 and 3 has been and how many delays there have been to establish free allocations
- A key issue will be how proposals for the reserve interact with the statement on page 9 of the communication 'specific provisions are necessary to tackle a potential supply peak that could result in 2020 from the return of back-loaded allowances' - is this cancellation of backloaded allowances for example?
- The strict criteria by which the allowances are released back to the market need to be clarified:
 - Carbon Price: "2 preceding years" is this 2 preceding calendar years, rolling years or EU ETS compliance years?
 - O How many allowances are added to circulation from the reserve when the high carbon price criteria are met? Are these added in addition to those when the number in circulation drops below 0.4bn?
 - When are allowances released from the reserve? E.g. the allowances in circulation in 2019 are to be published in May 2020. Is it at this point that any allowances are released from the reserve i.e. 2020 or is it the year after i.e. 2021?
- How will the MSR affect temporarily excluded installations?

Questions about the impact of the MSR

Even though commencing in 2021, because the volume of emission rights "in circulation" is
defined with reference to 2008, the (MSR) is actually a methodology to reduce supply and
thus increase EU ETS price in the medium term beyond what the market itself would
determine. If the volume in circulation were defined with reference to 2021, it would be a

- genuine mechanism to address *future* events e.g. another severe recession type demand reduction. Is there still a possibility to deal with only future events?
- The volume trigger means that allowances are removed or returned at Y+2. How will this
 delay in action potentially affect the market? It is possible that in the intervening period, the
 nature of the market could have changed sufficiently that the lagged automatic action of the
 MSR would not have the desired impact, but rather some other potentially undesired
 impact.
- What is the impact of taking allowances only from the auctioned allowances particularly if there are not any revisions to the carbon leakage list?
- It is very difficult to predict impacts of the stability reserve without understanding how it fits with the revised carbon trajectory including future projections of demand. It looks like the Commission wants to agree the stability reserve early making it difficult to assess impacts.
- It is unclear what take up there will be of CER conversion as Member States and operators use their limits set in the Directive. This might be a particular issue in 2019 and 2020 which influences the calculation of the volume in circulation.
- The other item that the Commission has not fully addressed is the interaction between the EU ETS and the proposed 2030 renewables target¹ (and potential energy efficiency target). Without a holistic approach, the Commission risk replicating the problem from the 2020 package, namely that the sub-targets will continue to undermine the carbon price. Does the MSR have the capacity to deal with this? If the allowances are in a reserve rather than fully removed does this make any significant difference to price or does the market simply treat the allowances in the reserve in the same way as if they were held by any other participant? Alternatively, how well do the rules governing accumulation in and release from the reserve mirror the expected behaviour of market participants, and how well do they mirror the behaviour of a profit-maximizing or efficient trader?
- Could there be a situation where all the criteria for allowances to be released from the reserve are met but there are no allowances in the reserve? If so, what happens then?
- Could the volume of allowances in circulation ever drop below zero? Modelling indicates this is mathematically possible. If so, what happens?
- What is the impact of credits from linked schemes on both the volume- and price-linked removals? The actual EU ETS circulation will be affected by long or short linked schemes as the MSR attempts to adjust the market for events that may take place a long way away from Europe but the calculation of volume in circulation appears not to account for this.
- How will the purchase/sell behaviour of industrial participants change if the MSR encourages the EUA price to rapidly increase?
- In the impact assessment it looks as if the MSR will lead to a reserve of about 1500M allowances by 2030. What impact will this have on auctioning at the back end of Phase 4? And does this matter?
- 2013 emissions data is needed for a transparent projection of surplus the biggest variable in EUETS is demand, the biggest change in demand definitions are at the start of Phase 3 hence the call for 2013 data. So how can the impact of MSR be properly assessed before the legislative process begins?
- Will the baseline remain at 2008 if the baseline remains at 2008 then MSR is a tool to reduce surplus to drive up the price

¹ Although in the impact assessment there is analysis of the -40% case which leads to a non-binding 27% renewables and a higher % in electricity generation. Despite the fewer allowances in the ETS on 2021-30, the level of surplus increases versus the reference case.

Questions about the process of agreeing and reviewing the MSR

- The biggest variable in Phase 3 for supply and demand is EU ETS installation emissions. May 2014 will see year 1 of phase 3 EUETS installation emissions published; for the first time the effect of new sectors, gases, installation activity definitions (e.g. combustion plant) will be available together with 2013 emissions from incumbent installations. Participants need to see from the Commission a new and transparent supply demand balance forecast out to 2030 with 2013 data before deciding on any response to surplus.
- If the principle of MSR is accepted then only the intervention levels remain to be negotiated
- Is 'by 2026' an appropriate review point?
 - Earlier provides an early opportunity for correcting functionality issues but data availability will be a problem
 - Later means that mistakes take longer to correct but data will be available.
 - Is a review point necessary? It is another market relevant event that could increase volatility.
 - The occurrence of a review point could show that the Commission lacks confidence in the mechanism.
 - What legal procedure will be used to implement the review changes? (delegated or implementing act)
- How has the Commission come up with the numbers it did (i.e. that an ideal 'market balance' is between 400mt and 833mt and that they should remove 12% or return 100mt). The alternatives in the impact assessment² were not created with stakeholder engagement.
- There are some mixed messages about the scope of the review of the market stability reserve by 2026. In article 3 they talk about 'in particular' reviewing the amounts to be withdrawn and returned and yet, on the other hand, in the recitals they clearly leave the door open again to a bigger changes ("The reviewshould particularly consider whether the rules on placing allowances in the reserve are appropriate with regard to the aim pursued to tackle structural supply-demand imbalances").
- What are the Commission likely to be consulting on is it the whole premise of the reserve or will it just be detailed issues such as the %age removal/rate of return to and from the reserve?
- MSR is an additional complexity to the EU ETS. There must be very good structural reasons for deploying it to justify the market distortion. Note the EUA market has demonstrated its ability to absorb surplus and still function well.

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² The impact assessment looked at a variant "option 2d", with a band of 400-1000M as well as other variations.