

## The Market Stability Reserve in Perspective

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### Abstract

This CEPS Special Report contributes to the debate on the Market Stability Reserve (MSR), which was proposed by the European Commission in early 2014. The MSR aims to introduce a degree of supply management into the EU Emissions Trading System (ETS). With the proposal soon to be considered, this report presents the MSR's rationale, and reviews the different options available for its design, governance and timing, as well as its consequences for the functioning of the EU ETS and the EU's climate and energy policy. Based on discussions in various stakeholder meetings organised by the CEPS Carbon Market Forum throughout 2014, the report takes the view that if the MSR is needed to ensure better market functioning of the still-young EU carbon, there do not seem to be good technical reasons that would advocate for the delay of its implementation.

### Disclaimer

This report is based on CEPS' research and was informed by various meetings and consultations with EU ETS stakeholders. The views expressed are attributable only to the author in a personal capacity and not to any institution with which he is associated. The views presented in this paper cannot be attributed to any stakeholder or participant in the events leading up to this report.

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The CEPS Carbon Market Forum was established in 2012 with the aim of creating a neutral space where policy-makers and regulators are able to meet carbon market participants and other stakeholders to discuss carbon market regulation and general policy issues.

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## Executive Summary

The proposed Market Stability Reserve (MSR) should be seen as an instrument that will rectify one side of the lack of supply flexibility in the EU Emissions Trading System (ETS) (resulting from a rigid auctioning schedule), and as a means to ensure good market functioning and price discovery.

Market flexibility provisions exist in all carbon pricing mechanisms introduced in other jurisdictions, e.g. California, Quebec, the Regional Greenhouse Gas Initiative (RGGI) and Australia (repealed in July 2014), in recognition of this shortcoming of a regulatory market.

In the cases mentioned above, the market stability provision is based on a price trigger, which is less desirable from a market point of view, and challenging to implement in the EU, given the institutional realities. Therefore the option of an MSR based on a volumetric trigger is preferable.

If the MSR is needed, we see no objective reason why it should not be implemented, as soon as the legislative process allows it. Any perceived positive effects that can be seen as arising from postponing its introduction would be greatly overshadowed by the negative consequences.

The negative consequences resulting from a postponement could be significant, and would include EU ETS reputational risks, resulting from market functioning failing to provide a price signal to achieve its long-term objectives. It would also include significant price volatility at the end of Phase 3 resulting from the re-injection of the backloaded allowances in the auction schedule. There does not seem to be any reasonable market justification, under current EU ETS provisions, for not placing the backloaded amount directly in the MSR. As with changes in other EU ETS provisions, they can, and should, be addressed through appropriate governance.

Stakeholders, especially industry covered by the EU ETS, have expressed concerns regarding the impact of the early introduction of the MSR on carbon prices, in the absence of post-2020 carbon leakage risk mitigation measures. These concerns, are legitimate, but largely of a non-technical nature, and do not detract from the merit of an early introduction of the MSR. However, it is important that competitive concerns be addressed expeditiously, through the political process. It must also be noted that the EUA price to determine inclusion on the Carbon Leakage List is €30, which provides for a higher price than currently observed in the market.

Our analysis also shows that MSR governance will be critical to its success. It needs to provide consistency and predictability. While formulas and rules will provide the backbone of the MSR governance, it will also have to include flexibility provisions. It is unlikely that we will manage to provide for every contingency this time round. As such, there needs to be provisions that would allow not only for periodic reviews, but also for revisions that can be triggered by a mechanism such as the annual EU carbon market report.

## 1. Overview

On 22 January 2014, the European Commission introduced the “Proposal for a Decision of the European Parliament and of the Council concerning the establishment and operation of a Market Stability Reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC”.

This legislative proposal was introduced at the same time as the proposed framework for the EU’s 2030 Climate and Energy policies, which is intended to reinforce the process of decarbonisation of the EU economy, and promote security of energy supply.

As outlined in the “Explanatory Memorandum”, the Market Stability Reserve (MSR) was proposed with the aim of addressing the concerns that investment decisions were being made against the background of an oversupply of allowances, resulting in a less than economically efficient way of reaching the ambitious mid-to-long term EU greenhouse gas reduction objectives.

The proposed MSR would ensure that when certain preselected levels of EUAs<sup>1</sup> (European Union Allowances) in circulation are broken (both floor and ceiling), then allowances would be taken out of the auction schedule, and put in the MSR (in case of excess supply), or re-inserted in the auctioning schedule (in case of insufficient amount in circulation).

This paper intends to address a number of questions, with a view to making a constructive contribution to the debate on the proposed MSR:

1. Is the MSR needed, and what problem(s) does it intend to solve?
2. What is the timing for the introduction of the MSR?
3. What are the options for governance?
4. What is the nature and level of thresholds?
5. What is the rate of input/output in the MSR?
6. How does it interact with other policies?

## 2. Background views

A number of facts and fundamentals, related to the EU ETS, and relevant to the MSR policy and technical discussions, need to be acknowledged.

Firstly, the EU ETS was conceived as a pure regulatory market whose stated objective is to “promote reductions of greenhouse emissions in a cost-effective and economically efficient manner”. It was intended to become the cornerstone of the EU climate change policy and help reach targets under the Kyoto Protocol and EU climate change policies in general.

For some, the unstated objective of the EU ETS was to drive not only operational change, but especially a technological revolution, which would steer capital towards cleaner sources of energy, and assist with energy efficiency, and the development and deployment of renewables.

For others, a GHG market is a technologically neutral instrument of price discovery, helping to minimise the overall societal costs of compliance with GHG reduction obligations. In such a view, if the price of carbon becomes zero in a particular trading period, it is not a concern, as it would signal that the **problem** is solved, and there is no demand for the product (allowances).

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<sup>1</sup> EUAs are the tradable unit under the EU ETS. One EUA represents the right to emit 1 tonne of CO<sub>2</sub>.

However, it must be emphasised that the **problem** referred to is the **reduction of GHG emissions from anthropogenic sources by 80% in 2050**, and not only an in-period objective, while we still have long-term, un-met objectives. Only by meeting both the short-term and long-term objectives can economic efficacy be achieved. This requires a visibility of the environmental objective post-2020, to 2030, and beyond.

Secondly, the carbon market must function in line with the principles of sustainable development, in that the environmental and economic aspects must be balanced.

**The price of EUAs**, which is important to achieve the environmental objectives, **needs to be balanced with the cost of carbon**, which carry with it competitiveness and carbon leakage risks for those installations covered by the EU ETS. The price of EUAs does not necessarily translate into carbon costs, as installations covered by the Carbon Leakage list receive free allocation.

Thirdly, the market created by **the EU ETS has functioned well**, as measured against some of the criteria that reflect good market functioning. These include: the presence of liquidity in the market, although many participants; a tight spread between bid and ask prices; the ability to enter and exit the market at all times; adequate market transparency and information; and the fact that the market is not driven by market power.

Fourthly, **the GHG market has certain unique features**, including:

- It is a **purely regulatory market, a construct, and one that is still new**. It still is in the process of acquiring a track record and the long-term credibility that other non-regulatory commodity markets have built over decades or more.
- It has a **clear policy goal** of reducing GHG emissions at a minimum cost to society.
- The traded product can be seen as having the characteristics of both a **commodity and a currency**.
- **Demand fluctuates**, and is influenced by cyclical (economic) and structural changes (technology changes, interaction with other policies, etc.).
- **Supply is inelastic**. It must be emphasised that supply flexibility has two aspects: through free allocation (based on historical production levels, which can be divorced from the realities of the economic cycle) and through the auctioning schedule (set well in advance). For a complete solution, both sides need to be addressed.

Finally, there is the reality that there is currently an excess of EUAs in the market, which the 2012 Carbon Market Report estimated at 955 million in early 2012 (it is now estimated to have reached over 2 billion allowances, i.e. more than a full year of allowances under the EU ETS). This excess supply can be seen as resulting primarily from a combination of the impact of the economic crisis, the larger-than-predicted impact of other policy actions (such as energy efficiency (EE) and renewable energy (RE) targets), the influx of international offsets, and the mitigation efforts by covered entities.

To address this current excess supply, backloading was adopted by the European Parliament and the Council in December 2013, which ensures that part of the surplus will be withheld from the auction schedule in 2014 -2016, and reintroduced in 2019 to 2020, at the end of the third trading period.

It must therefore be concluded that **the real objective of the EU ETS is good price discovery**, in the context of meeting the 2050 environmental objective. This can only result from good market functioning, which will allow for rational economic decisions and asset allocation, to be made in the context of environmental scarcity (a limited amount of GHG that can be pumped in the atmosphere).

### 3. Flexibility in other jurisdictions

Based on the brief overview of **flexibility in other jurisdictions** provided in Appendix 1, we can conclude that other jurisdictions that have introduced carbon pricing mechanisms (CPMs), such as California, Quebec, the Regional Greenhouse Gas Initiative (RGGI) and Australia, have also recognised the regulatory nature of the mechanism and made provisions to address the lack of flexibility on the supply side.

In most cases prices were targeted. This can be seen as the result of the following considerations:

- Price is often seen as a clear outcome that will influence the effectiveness of the market in attaining the fundamental goal of the jurisdiction in introducing an ETS.
- While market liquidity is a purer way to assess good market functioning, it could have also been seen as being more in need of interpretation – what causes liquidity fluctuations?
  - Market liquidity will be influenced by the behaviour of market participants.
  - The behaviour of market participants from the financial sector (or with a financial background) is very different from those with a pure compliance mindset and will have significant impact on liquidity. Compliance buyers may act in a more ‘holding’ pattern with less price elasticity, and this may alter the normal parameters of liquidity over time.
  - The ‘hedging’ pattern of the power industry also changes, and may be a function of the energy mix and the degree of market liberalisation.
- Price is an element that can be used as a trigger in the jurisdictions mentioned above, as there are no political or constitutional barriers to doing so.

The approach has been developed mainly through a set of rules that ensures regulatory stability. However, the possibility of executive intervention exists, in case extreme circumstances should develop.

### 4. MSR features and parameters

To discuss the features and parameters of the MSR, it is necessary to establish the principles/criteria against which its design and functioning will be judged. The MSR can be judged on the basis of its impact on:

- a) Climate change action in the EU – the objective of the EU ETS to 2050,
- b) Its impact on EU ETS functioning as a market and
- c) Its impact on the competitiveness of the sectors covered.

These criteria should form the core of the discussion of the proposed design and architecture of the MSR, as well as the value of its parameters.

In designing the MSR, we must also make sure that we set a number of principles.

The important principles that we see for the MSR are:

- It must recognise that the core goal of the EU ETS is good price discovery, as discussed above. This implies that not all-excess supply of EUAs is ‘bad’. While it is difficult to determine the causes of excess supply of EUAs in the market in the short term, it is essential (and also possible) to do so in the mid-to-long term. The mandatory annual “State of the Carbon Market Report” is the appropriate vehicle for determining the causes of variation in supply, and specifying how to treat it.

- It must be consistent, principled, and easy to understand. Its actions must always be seen as working to ensure a level of liquidity that allows for good market functioning.
- It should be activated only in the case of significant and cumulative changes in EUA in circulation; it cannot become an instrument with which to micro-manage the market.
- It must work with the market and support market fundamentals.
- It must be resilient and allow for flexibility: circumstances change, and by definition we cannot predict all scenarios and provide for them.
- It must be predictable in its behaviour: its interventions must be well understood and follow the same logic. This may imply simply functioning based on rules, but it does not necessarily preclude the inclusion of other provisions to provide for the flexibility discussed above. Predictability does not imply automatic, formula-based intervention only – it can allow for some interpretation.

#### 4.1 Objectives of the MSR

Let us now turn to the first question posed earlier: “Is the MSR needed, and what problem(s) is it intended to solve?”

The main objective of the MSR is to address a design shortcoming in the ETS, namely **the lack of flexibility on the supply side**. Other objectives that have been mentioned in policy debates must fall within the logic of rectifying this lack of flexibility. As already mentioned, however, the MSR can only address the lack of flexibility on the supply side which results from the fixed auctioning schedule. The lack of flexibility resulting from free allocation still needs to be addressed.

It must be noted that some asymmetrical supply-side flexibility was provided in the EU ETS through Article 29a in cases of acute, and potentially abrupt, upwards price spikes. These would result from the market being short, and allows for additional liquidity to be injected in the market. However, no similar provision was made for the market being long, where allowances should be removed from the market.

One other objective that has been mentioned is the elimination of the current excess of EUAs in the market. However, the current excess liquidity is only a symptom of the lack of supply-side flexibility, which has accumulated over time. Since no cure was in place, special measures will be needed to address what is no longer a chronic problem, but an acute one.

In ‘natural’ markets, supply will react to changes in demand. In the case of the ETS, supply is fixed through the ETS Directive, on a fixed auction schedule and a free allocation system based on benchmarks and historical levels of production.

The total number of allowances for the trading period is fixed. This is independent of whether the assumptions made when the auction schedule was set, including economic projections, are still true, or whether we are seeing significant deviations during the trading period. It must be emphasised that this lack of flexibility is the outcome of a desire, expressed by many stakeholders, to ensure regulatory stability during a trading period.

#### 4.2 Timing for the introduction of the MSR

The current proposal specifies that the MSR should start at the beginning of the fourth trading phase, in 2021, and proposes transition measures that would spread the additional liquidity from the backloaded allowances over three years (2020 to 2022).

In this case, the questions that need to be addressed are:

- *If the MSR is needed, why wait?*
- *Does early introduction close the door on any other policy choices?*
- *What are the pluses and minuses associated with starting the MSR as soon as the legislative process would allow it?*

It has been argued that the MSR cannot start during Phase 3, as it would:

- i. Impact inside a trading phase, affecting confidence in the stability of the regulatory process and trading strategies of market participants
- ii. Impact EUA prices and future competitiveness of EU industry, at a time when there is no clarity on the carbon leakage risk mitigation measures that will be put in place for the post-2020 period. Simply put, how can we agree to take action that could increase carbon prices (through the MSR decision), when we don't know the impact of the carbon costs (treatment of carbon leakage risks) – or “who pays the bill?”
- iii. Run contrary to the political commitment that was made in the backloading decision (Decision No 1359/2013/EU of the EU Parliament and of the Council of 17 December 2013 amending Directive 2003/87/EC clarifying provisions on the timing of auctions of greenhouse allowances), which specified that “beginning on 1 January 2013...the Commission shall make no more than one such adaptation for a maximum number of 900 million allowances” (Art 1). While it could be, and has been, argued that this argument is not technically sound, this statement was nevertheless widely interpreted in this manner.
- iv. Some parameters of the MSR are interdependent with other components of the 2030 climate and energy package. For example, it can be argued that the MSR thresholds will be influenced by the 2030 cap and the total amount of allocation to be auctioned.

On the plus side, however, an early start-up of the MSR (as early as 2016) would ensure that the EU ETS starts again to provide a price signal that would be more in line with the signal from a market that would have had ‘normal’ elasticity of supply. In this way, the ETS would cease to be seen as a residual effort in addressing climate change.

An added benefit would be the earlier start-up of abatement measures, driven by a price signal that reflects a level of scarcity that a market with supply elasticity would show, as well as long-term scarcity.

The concerns expressed regarding an earlier start-up of the MSR need to be clearly addressed. With respect to competitiveness, the early start-up of the MSR will have a positive impact on the amount of abatement in the EU, which would also lower the cost of meeting climate change objectives in the long-term, and implicitly help competitiveness.

Carbon leakage risks to 2020 have been addressed through the new carbon leakage list, while the EC has signalled the continuation of measures to address carbon leakage risk post-2020, without providing a proposal at this stage. The connection between the MSR and the post-2020 carbon leakage provisions represents an important negotiating strategy for covered sectors, and one that reflects the desire to be re-assured that their needs are recognised in a world of asymmetrical climate change policies.

This is a political and strategic issue, not a technical matter, which should not prevent the early start of the MSR. It needs to be treated as such, and any reassurances that industry seeks in this respect would also need to come from the political sphere. If anything, in our view, this would point more towards the need to speed up the process of approving the 2030 package, but not to slowing down the MSR.



In our view, the MSR does not represent a one-off change in the auctioning schedule, but rather one part of the set of structural changes to be introduced in the EU ETS as called for and recognised in the Backloading decision.

It is difficult, at this time, to clearly identify the relationship between MSR parameters and other elements of the 2030 climate and energy framework. In addition, a strong argument can also be made that designing and defining parameters for any system, and not only the MSR, that is slated to come into operation in 2021-22 (that is, 5-6 years from now) would require a considerable leap of faith.

The world in which the EU ETS will operate will likely be very different not only in terms of the cap, but also with respect to the energy mix and energy market functioning. This fact would also be reflected in, among other matters, hedging needs.

To address the concerns outlined above, it would be important to ensure that what is provided for is a clear process, and one that allows for the review of the MSR at critical points. This will be further outlined in the section on Governance. We do not believe, however, that these points, however valid, argue for a delay in MSR approval and implementation.

*To conclude, the arguments in favour of prompt implementation of the MSR fully justify a prompt decision on this matter.*

### 4.3 MSR interaction with other policies

The MSR can be expected to interact with other EU policies to address climate change, including:

- Treatment of the backloaded amount
- Renewable energy (RE) target
- Energy efficiency (EE) target
- Carbon leakage risk mitigation measures
- Article 29a of EU ETS

In addition, the type of liquidity to be captured by MSR is an important issue. Should it be restricted to capturing changes in economic cycles, or should it have a broader scope, including policy overlaps?

#### *Amount of compliance units in the market*

Excess EUAs in the market could be regarded as ‘good’ and ‘bad’. ‘Good’ surplus is caused by real abatement efforts (including development and deployment of new technologies, impact of other policy measures such as those resulting from RE and EE, etc.), or in general, by reductions in emissions that are permanent, and therefore ‘structural’. This type of surplus must be recognised and welcomed, and should not be penalised or removed from the market.

On the other hand, a ‘cyclical’ surplus, resulting from economic cycles, needs to be removed from the market, as it can be directly attributed to the lack of flexibility of the EU ETS on the supply side.

In the short-to-medium term, it is impractical to try and differentiate between ‘good’ and ‘bad’ surplus, as the causes are not immediately evident. However, in the long-term, this may become much more feasible. As such, it should be accepted that in the short-to-medium term the MSR would capture all excess liquidity, regardless of its nature.

The significant number of EUAs (compliance units) that are currently in circulation in the EU ETS can be traced back to a number of causes:

- Impact of the economic recession - cyclical
- Impact of the RE and EE targets through GHG reductions
- Mitigation actions undertaken by covered installations in response to carbon and/or energy prices.
- Influx of CERs

It is important that this difference be taken into account in the long-term, and that the parameters be set to account for it. This would imply that in the course of the periodic reviews of the MSR, consideration would be given to whether excess EUAs from 'structural' changes (e.g. technological improvements) could be re-injected in the market. Surplus of a 'cyclical' nature should be left in the MSR.

In any review of the ETS/MSR, decisions to take this excess supply, and put it in the MSR, should take into account the causes/origin of the excess.

### *Treatment of backloaded amount*

The treatment of the backloaded amount will also have an important impact on the success of the MSR, as well as of the EU ETS overall. If the MSR is accepted as a valid proposition, it seems to make little sense to re-inject the excess EUAs into the market, only to have the MSR work to have that excess removed.

Re-injecting the backloaded amount into the auctioning schedule, only to create an MSR to remove it over time, would cause significant and unnecessary price volatility, and seriously damage the effectiveness and credibility of the EU ETS. If there is an acceptance that most of the current excess EUAs in the EU ETS is of a "cyclical" nature, then that surplus belongs in the MSR.

As mentioned, this would have the added benefit to also eliminate an unjustifiable, and significant, price volatility and zigzag effect, with prices plummeting at the end of Period 3, and taking a long time recover.

### *Article 29a of ETS*

This article, which has not been invoked so far, is a measure to address abrupt price spikes, without being specific on the causes of the price movement. In many ways it is not dissimilar in its provisions to the Reserves in California, Quebec, RGGI and Australia in that it brings additional supply into the market based on a price trigger.

In the legislative proposal, its action is now combined with the MSR and would trigger the release of the same amount of EUAs (100 million), if the conditions in Article 29a were met.

There are many reasons for this provision to be eliminated. To start with, it lacks symmetry (it only acts on price spikes, but not depressed prices). We feel that any such provision should be able to address both excessive, as well as depressed prices. In addition, it breaches the argument made in legislative proposal, and that most, if not all stakeholders tend to agree with – an MSR trigger should be volumetric, based on liquidity, and not price driven.

However, it has one redeeming feature, in that it has a different time frame. The MSR, as currently envisaged, has essentially a two-year time lag. The time frame for Article 29a is six months of prices over the average of the previous two years. In that sense, it has a very different function, as it is designed as a tripwire that would prevent rapid spikes, and make the system unworkable.

### *Carbon Leakage Risk Mitigation Measures*

Some stakeholders see the MSR, and the treatment of CL risk, as two sides of the same coin: one driving carbon prices (MSR), the other one carbon costs (and impacts carbon leakage). While this is accurate when it comes to industrial policy and political and negotiating strategy, it is not so from an objective and technical point of view.

Many, but not all, in industry, find it appropriate that industrial policy and political and negotiating strategies regarding carbon leakage post-2020 take place on the same timetable as the adoption of the MSR. As this is not the case currently, they hesitate to give their support to MRS, although they support MSR from a technical point of view.

In the current form of the **CL provisions to 2020** (fixed, historical based free allocation), there is little interaction between CL provisions and the MSR. We say this in the sense that we see no clear evidence that MSR parameters would be influenced by CL risk mitigation measures.

In addition, while the MSR can be expected to result in higher EUA prices, the carbon price that is factored in the determination of the Carbon Leakage List is 30 EUR, much above the current market price. This should also provide reassurance to industry that this scenario is accounted for.

In the context of the discussions on **the post-2020 CL provisions**, there are a number of options that are being examined, including demands from industry for a system of allocation for both direct and indirect costs, which is also more in line with actual production levels, as well as the set aside of the backloaded amount to compensate sectors at risk of carbon leakage (including as detailed in the June 23, 2014 Ecofys proposal titled “A Dynamic Allocation Model for the EU Emissions Trading System”).

While it is too early to speculate on the final shape of the post-2020 carbon leakage risk mitigation provisions, it is not obvious how, if at all, they would affect the overall shape and architecture of the MSR, or vice versa.

While some examples of interactions can be illustrated, they can and should be addressed through the normal governance of the MSR, together with other parameters that will also be in need of review. For example, it could be argued that the transfer of the backloaded amount directly into the MSR could affect carbon leakage provisions post-2020, as they would not be available for a ‘carbon leakage reserve’.

We see such a decision as part of the initial set up of the MSR, a decision that could be revisited post-2020, when the new carbon leakage provisions would come into effect. It is not part of the ‘MSR architecture’.

As many other parameters that will shape the carbon market, changes in the free allocation system may lead to the need for adjustments to the value of some of the parameters in the MSR.

That is something that will need to be examined and considered anyway for other changes in the EU ETS and its environment, which will occur in the post-2020 period. It is not unique to the MSR. Such review will be done in accordance with the governance of the MSR, which is discussed below.

The MSR must be accepted on its own merits to ensure good market functioning, by addressing the inflexibility of the supply side of the market. Carbon leakage risk mitigation measures are also an issue on their own, and will be introduced if they can be justified, and in the form that will be agreed through the legislative process.

## 4.4 Triggers/Thresholds

### *Nature of the trigger*

In the course of discussing the MSR during the EC consultations (October 2013 and June 2014), as well as in informal meetings (e.g. 3 CEPS Workshops in April, May and June 2014) two main issues were raised: the nature of the trigger, and the value of the thresholds.

There was strong support amongst stakeholder for the use of a volumetric trigger in the MSR, based on the supply imbalance in the markets. The current legislative proposal puts forward a proposal for such a formula.

This runs contrary to the practice that is emerging in other jurisdictions (discussed above), which uses allowance prices as a trigger for the reserve, in some cases coupled with a price floor.

It must also be said that the EU ETS has in Article 29a a trigger that is price-based. Neither in the EU ETS, nor in the other jurisdictions, have the level of the price triggers been reached. As such, it is difficult to tell how the market would react.

The EU ETS structural reform debate, including the MSR, was undoubtedly triggered by the persistent low price of carbon in the EU ETS, which is a symptom, but not the problem itself. As such, it may be tempting, certainly simpler, but very difficult from a political and institutional perspective, to introduce a price corridor in the EU, at the EU level. It would also, in our opinion, run contrary to the establishment of the EU ETS as a market based instrument,

As an indirect price shaper, a volumetric trigger is more complex, and carries additional unknowns (e.g. the price elasticity of carbon), but has the merit of being purer from a market perspective (it is trying to address good market functioning resulting from a flaw in market design). It also has the significant advantage that it is politically implementable in the EU.

A second issue that was often raised is whether a trigger based solely on number of EUAs in the market is truly representative, and will capture accurately the changes in external conditions. Different combinations were proposed that would somehow capture GDP and production level (for the EU ETS sectors).

This idea cannot be discarded, should continue to be monitored, and data collected, such that a reflection based on real data can be undertaken when the first review of the MSR is undertaken.

For the moment, the principle of Simplicity needs to prevail and the inclusion of too many triggers will make the MSR increasingly complex, and difficult to understand.

### *Value of the thresholds*

The current value of the threshold's lower limit at 400 million, and ceiling at 833 million allowances, are figures that have a large amount of subjectivity. They have been determined in consultation with stakeholders, to allow for an orderly functioning of the carbon market, based largely on what are believed to be the hedging needs of the power industry.

Some stakeholders feel that higher figures are needed in order not to put pressure on the demand side and figures offered are higher than in the EC proposal (France proposes 800 million and 1,300 million). Others feel that lower figures would be better suited.

While these figures may be appropriate at this time, they are unlikely to stay unchanged, as hedging needs vary with many factors, including energy mix, market liberalization, energy

prices, etc. As such, the level of the triggers will have to be closely monitored and reviewed as part of the MSR governance process.

#### 4.5 Rate of removal/insertion

As currently outlined in the legislative proposal, the rate of removal from the MSR (12% of excess liquidity, with a minimum of 100 million) and the rate of re-insertion into the auction schedule (100 million) are asymmetrical.

While re insertion rate is constant at 100 million, the removal rate is variable, and can be much higher, depending on the surplus in the market.

It is difficult to justify what would seem as different levels of concern with respect to low prices (treated to an increasing absolute amount of EUA removal) and high prices (treated through a constant amount of EUA re-injection).

There is however a balance provided, as a 100 million EUS release from the MSR can also be triggered through provisions under Article 29a of the EU ETS. This ensures a quick reaction to early warning prices spikes.

As a general view, it would be preferable that the rate of removal and re-injection in the auction schedule be symmetrical, especially as this would signal similar concern for prices that are excessive, as for those that are too low.

Another issue that was also identified was the rate of removal, which in the legislative proposal is set at 12%. According to Point Carbon, based on the current surplus and the proposed rate of removal, the current surplus would last until somewhere in 2027. This is seen as very slow, and not helping to correct the problem within a credible timeframe. Other models show an even lower rate of reduction of the surplus.

Two potential solutions emerge. One solution would to eliminate the rate, and simply decide that the solution would be to remove the entire surplus to the upper threshold of 833 million, or add enough to the auction schedule to reach the lower threshold (400 million).

This could be justified if 400-833 million EUAs is seen as the appropriate bandwidth, and would have the added benefit that it would provide the consistency in the logic of putting the backloaded amount directly in the MSR.

The one unknown would be market reaction to such an approach, as it may be seen as too abrupt. However, this should not be a surprise in the case of the backloaded amount, since the proposal of putting the whole backloaded amount in the MSR has been discussed broadly.

This is also unlikely to create too much of a shock in any particular year, as it is highly unlikely that a huge surplus would emerge year-to-year. It has taken a number of years to build the current surplus.

In addition, such an approach could also impact good market functioning if it should lead to situations where there is no auctioning for a significant period. It could increase short-term liquidity risks.

A more conventional solution would be to change the rate from 12% to a higher rate. Point Carbon simulations at 20% show an elimination of the market oversupply in 2024. Other rates have been suggested that would use different formulas, including 33% of the difference between the total surplus and the lower threshold.

## 4.6 Governance

The governance of the MSR is important, as it needs to reconcile the MSR principles enunciated above, with the EU political and institutional realities. The role of the MSR, to try and provide flexibility on the supply side of the carbon market, is made complex by the environment in which it operates, and the forces it interacts with. Markets, and market forces are unpredictable, and trying to define every scenario, and provide for it, would not reflect reality.

The MSR needs to be predictable and consistent, while at the same time flexible. For the MSR to be resilient it must have a governance system, which would allow it to react, within a credible timeframe, to changing conditions, in a consistent manner.

Whether this can be achieved will depend to a large degree on how one defines, and operationalises, **consistency and predictability**. It can be interpreted as ensuring that all interventions are completely rule-based, formula-driven, without any opportunity for human judgment. Alternatively, it can be defined as totally driven by human judgment, and guided to some degree by rules and formulas. This is what some would advocate in the form of a ‘carbon bank’.

We would prefer to define consistency and predictability, as an approach that ensures that the objectives and rules are clear, they do not change without due process, and are easy to understand, by all stakeholders. We have to recall that not all stakeholders have the same access to information, or the same ability and/or inclination to monitor and interpret rules and equations that govern the market.

However, at the same time, the MSR governance system must also include provisions that would allow human judgment to evaluate the situation, and set the direction and parameters at **inflection points**, for those parameters that may require such interventions.

Therefore, the formulas that are put forward in the legislative proposal, with the caveats and comments mentioned in this paper, will form the backbone of the MSR governance.

However, in the course of this paper we have also highlighted moments when there needs to be a check for market balance adjustment needs (cyclical vs structural liquidity variations). While these checks can be periodic, it would seem to us that the current proposal of a 5-year period might be too long, especially when the MSR is in its infancy.

In addition, the opportunity to initiate a review should be provided between the scheduled checks. This could be done in a number of ways, including when the reserve signals through its size that something more fundamental has happened.

Alternative approaches could include the use of the Carbon Market Report, or a Committee of Experts, to recommend that a review of the MSR be initiated.

What is equally important is that provisions be included to ensure that all appropriate parameters be monitored in order to allow for a comprehensive and objective review, and, if deemed necessary, update the MSR. As mentioned above, while this may not be practical in the short-to mid-term, in the long term it will be important to understand the causes of a surplus that was been parked in the MSR – and whether it belongs in there or not (is it a “good” or a “bad” surplus?).

## Conclusions

The MSR cannot be seen as a stand-alone proposition, but needs to be contextualised. The MSR must be seen as a *principled, consistent, and long-term approach for the good functioning of the*

*EU ETS*. It would help to avoid a future backloading, which must then be seen as a temporary and ad hoc measure, a stopgap.

Acceptance of the fact that **there can be a cyclical imbalance** in the EU ETS, as illustrated by the **one that currently exists in the EU ETS**, can only lead to the conclusion that an MSR is needed. The EU ETS was not built for the scenario of a severe disruption in the economic cycle, however reality turned out to be significantly different.

The justification for postponing the introduction of the MSR until the end of Phase 3 of the EU ETS needs to be balanced against market realities. There are no technical impediments to its immediate introduction that cannot be addressed through good governance. Postponement will only result in probable and significant price volatility at the end of Phase 3, as backloaded supply is re-injected, only to be removed by the MSR.

## Appendix 1. Flexibility in other jurisdictions

The EU, through the EU ETS, has been a pioneer in introducing carbon-pricing mechanisms (CPM). Since 2005, many other jurisdictions have observed the functioning of the EU ETS, internalized lessons learned, and have applied them to their own CPMs. This is the case of the design of Regional Greenhouse Gas Initiative (RGGI) and the California ETS in the US, and the CPM that was operational in Australia until recently.

In discussing what others have done, we need to recognize that the EU ETS is much broader in scope than the markets mentioned above, and has been in operation much longer. As such, the history that would allow one to draw lessons from the operation of these systems is limited at best.

In addition, some of the solutions that were applied in other jurisdictions need to be seen within the context of the political and legislative processes in those jurisdictions, which in some case are significantly different from the realities of the EU. Solutions cannot be transposed in a vacuum, without considering political realities.

### a) California

It must first be emphasized that the positioning of the California ETS is fundamentally different than that of the EU ETS. The EU ETS is the central pillar of the EU's climate change policy and carbon price is conceived as the driver to de-carbonization. The California ETS is a "residual mechanism", in that it induces reductions not achieved through regulations ("complementary measures").

California has addressed the flexibility of supply side both from a floor and ceiling perspective. It has introduced a price floor at \$10/ton, which addresses a potential excess liquidity in the market, and ensures a minimum reassurance for those that make long-term investment commitments based on carbon prices. The price floor does not differentiate between the origins of the excess allowances. It assumes that in the short-to-medium term, no revolutionary solution will emerge that would push prices at level lower than the floor.

The excess of allowances is addressed through two mechanisms. One is the Allowance Price Containment Reserve (APCR), which is comprised of allowances that are withheld from the California budget each year. Compliance entities can access the APCR (APCR allowances cannot be traded) six weeks after each regular auction, at three different Tier levels (\$42.38/\$47.68/\$52.98). These prices are significantly above the current California allowance prices. Processes for increasing the APCR in case it becomes depleted are currently contemplated.

As a secondary measure, allowances that do not clear the regular auctions, are put into an Auction Holding Account and brought back after a two regular auctions clear.

These two provisions taken together provide for long term economic cycles that will put pressure on prices (APCR), and short term price spikes (Auction Holding Account)

The Quebec ETS, which is currently linked to California, has a system that is very similar, with some non-essential differences.

As a conclusion, the California system recognizes that there is a lack of flexibility and tries to avoid extreme price volatility that would make the system unworkable (too high) or irrelevant (too low). It is targeting prices, not volumes. It is largely based on pre-determined formulas, with the possibility of executive intervention in more extreme cases (but not restricted to ETS).



**b) RGGI**

RGGI has also provided for a floor price and a Cost Containment Reserve. Like in California the price in the CCR is indexed and allowances are available at a set reserve price.

In the RGGI case the system targets prices and not volumes, and has a fixed set of pre-determined rules.

**c) Australia**

The new government has dismantled the Australia CPM July 2014. However, innovative ideas were part of that design, and while it is difficult to tell how effective its approach would have been as it was never tested, the ideas and principles need to be reflected upon. It contained a combination of human intervention and pre-determined actions, and targeted the determination of the cap.

In the Australian CPM, the Climate Change Authority (CCA), an independent body appointed by the Prime Minister for 5 years, had to issue every year a report entitled "Targets and Progress Review" which outlines

- Australia's progress towards its medium and long term reduction targets
- Australia's emissions reduction goals.

In this report the CCA put forward the cap for the fifth year of the rolling five-year CPM cap. The Government has to review the report, write reasons for decision and had to issue a regulation with the 5<sup>th</sup> year cap.

The Government regulation had to pass Parliament, or, if rejected, was automatically replaced with a cap pre-set through CPM act.

**d) China**

The pilot ETS in China do not currently have any reserve provisions. However, discussions with Chinese officials and stakeholders seem to indicate that those who design these systems are fully aware of the current predicament in the EU ETS and understand its root causes. No concrete measures have been put in place so far to address this issue.



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