EU’s supply-managing MSR destabilising market, needs price-based redesign - researchers

The EU carbon market’s MSR urgently needs to be redesigned to use allowance prices rather than circulating volumes to manage supply, researchers argue, as the mechanism in its current form risks destabilising the ETS and undermines the bloc’s emissions reduction targets.

In a paper published this month by researchers from institutions including the Potsdam Institute for Climate Impact Research (PIK), the Climate Economics Chair of Paris-Dauphine University, and the University of Hamburg, the authors contend that the EUA price is a more reliable indicator of expected scarcity changes than the total number of allowances in circulation (TNAC), and thus should be used to balance EUA supply.

The MSR is set to be reviewed this year along with wider reforms to the EU ETS, all aimed at coordinating with the European Green Deal and tougher bloc-wide emissions targets of 55% below 1990 levels by 2030 and net zero by 2050.

Launched in 2019, the MSR is widely credited for lifting EUA prices from single digits in 2017 to levels of €20-30. Under its current rules, the MSR absorbs 24% of the annual TNAC – a measure of the market’s oversupply – as long as the figure is above 833 million tonnes. Should it fall below that number but remain above 400 Mt, the permit intake stops. And if the TNAC sinks below 400 Mt, the MSR starts to release allowances to the market at a rate of 100 Mt/year.

But the researchers claim that while the TNAC is “a reasonable first-pass proxy of scarcity induced by past shocks, it may point in the wrong direction for anticipated future changes in market fundamentals.” This, in turn, can lead to “an unintended and highly undesirable outcome”, they warned.

For example, if the anticipated scarcity increases, market participants may decide to hold more allowances to hedge against future abatement costs. And as these unsurrendered EUAs would be counted towards the market’s total oversupply, this could result in more allowances being withdrawn from government auctions.

“MSR-induced flexibility becomes counterproductive, increasing rather than dampening the price impact of anticipated shocks,” the paper said.

The authors added that based on the current rules, the ETS also becomes susceptible to manipulation and gaming as the TNAC approaches the trigger points, while there is also a lack of clear economic guidance for regulating the intertemporal use of allowances relative to predefined thresholds.

The 400 Mt and 833 Mt triggers are understood to have been set largely based on the needs of utilities that forward hedge their fossil fuel-fired power generation.

“Practically, a TNAC-based MSR ignores the diversity and endogeneity of banking motives (e.g. passive or active hoarding, hedging, and speculation) that contribute to the TNAC,” the report said.

“The current approach of relying on the TNAC to create a healthy ‘hedging corridor’ fails as the TNAC is neither an informative measure of allowances available for hedging nor a reliable indicator of allowance scarcity.”

In addition, the report, along with other critics, points out that the TNAC is calculated only once annually each spring for the previous calendar year, meaning market shocks may not start to be addressed by supply adjustments for a period of up to 20 months.

Case in point last March, when most of Europe went into lockdown due to the Coronavirus pandemic. The exact demand-side impact of this event will be confirmed when the 2020 TNAC is published this May, with the boost in EUA supply only starting to be absorbed by the MSR this coming September – some 18 months after the fact.

GREEN PARADOX

The authors also cautioned that the MSR’s current calibrations threaten the EU’s goal to more than halve greenhouse gas emissions by 2030, creating what they call a “green paradox”.

“Prominent climate policies such as coal phaseouts, renewable support schemes, and energy efficiency measures induce additional abatement in EU ETS sectors that is independent of the market price of allowances,” they wrote.

“If most of this extra abatement is expected to materialise in the (potentially distant) future, the MSR tends to increase the supply of allowances rather than reduce it because the need to bank allowances for future use, and hence the TNAC, decreases.”
And thus, the announcement of additional measures, which lawmakers claim are required to reach the EU’s emissions reduction targets, can lead to a further increase in GHG output, the paper added.

“While the MSR aims to foster synergies with other climate and energy policies, its reliance on the TNAC as a measure of scarcity risks undermining additional abatement efforts. This effect is more likely for impacts in the near future if market participants are myopic.”

As well, the researchers echo the widely-held refrain that the market’s erratic prices and excessive complexity impede both private-sector investment in low-carbon technologies and effective, complementary climate policies at the member state and sub-national levels.

“The rules of the MSR are transparent. However, their effects are highly complex, counter-intuitive and difficult to grasp for market participants, regulators, stakeholders, and the electorate.”

The paper contends that a destabilised market can result in an unpredictable regulatory patchwork while fuelling stakeholder objections and creating new risks from how these varying policies interact.

As an example, it cites the German government’s pledge to voluntarily cancel a yet-to-be-determined number of EUAs to offset the impact of the country’s coal phaseout programme.

The authors believe this approach, to retire some if not all of the allowances freed up by the plant closures, is highly ineffective under the current EU ETS design, as these cancellations reduce the TNAC and hence the number of allowances withdrawn by the MSR.

This pointing out of the ineffectiveness of voluntary efforts can then substantially reduce decision-makers’ intrinsic motivations, the report added.

And taken all together, the authors argue that these design issues and policy risks may discourage other countries from seeking to link their carbon markets with the EU ETS, which ultimately results in less efficiency and higher compliance costs for emitters.

“The EU ETS is the only system to adopt a quantity-based flexibility mechanism among the existing ETSs. Other schemes use price-based flexibility mechanisms … Price- and TNAC-based flexibility mechanisms are not compatible as they pull in different directions whenever the TNAC fails to capture changes in allowance scarcity, and they foster the potential for an uncontrolled transfer of taxpayers’ money from one jurisdiction to another.”

USE THE PRICE

To address this suite of problems, the researchers propose the MSR be recalibrated to use a price-based flexibility mechanism to manage allowance supply, as EUA values represent a “robust, real-time measure of scarcity.”

“Conditioning allowance supply on prices has the potential to contain the risks outlined above, stabilise the market and specify how changes in market fundamentals translate into changes in total emissions and allowance prices transparently and reliably in the EU ETS Directive.”

“Tagging the adjustment of the [emissions] cap to the price of allowances would provide what the current MSR is aiming for but falls short of achieving: price stability, productive co-existence with other climate and energy policies, predictability and hence reliable investment signals,” the paper added.

One of the report’s authors, PIK’s Michael Pahle, has previously called the MSR a “market instability tool” based on its current design, and he advocates the introduction of a price corridor, or a ‘Price Stability Mechanism.’

Speaking to Carbon Pulse last year, he also cites Germany as an example here, with the government opting to introduce price floors and ceilings in its new national carbon market covering the non-EU ETS sectors of transportation and building heating.

The UK, which has launched its own ETS after leaving the EU last year, is also implementing price controls.

The researchers believe that replacing the TNAC with EUA price triggers will allow policy-makers to “gain better control” of key features of the EU ETS.

“If the costs of achieving the original abatement target drop, one can either implement a more ambitious abatement target or ease the financial burden on firms and consumers – or split the gains between the two,” the paper said.

“Furthermore, an explicitly defined allowance supply function increases price stability, reducing reasons for and vulnerability to speculative attacks … while reducing firms’ need to hedge.”

As well, the authors argue it facilitates linking of the EU ETS – in full or in part – to other carbon markets, including a possible new, bloc-wide sibling scheme to regulate still uncovered sectors such as transport and buildings.

EU lawmakers have historically been reluctant to consider price-based intervention in the ETS, but a growing number of analysts now seem to be standing behind the idea.

What’s more, observers note that the European Commission must be ok with the idea in principle to have established Article 29a of the ETS Directive, which opens the door for supply to be added to the market should EUA prices rise too high, too quickly.

Ahead of this year’s review, stakeholders have been asked to consider how to achieve a “robust” and “future-proof” MSR through modifications to its current parameters or other measures.
Most observers agree that the MSR has proved to be an invaluable tool to help protect the European carbon market from demand shocks, but they also concur that the instrument needs to be reassessed in light of a changing market landscape, while its objectives need to be more clearly defined in the face of an evolving EU ETS.

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