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Mercuria Energy America, a Delaware corporation, is an independent energy marketing and trading firm. Mercuria has been a long-time market participant as a regulated entity or a general market participant in the RGGI program.

During the September meeting, the RGGI states outlined some initial modelling outputs and supply scenarios, with the regional program focusing on net zero either by 2035 or 2040. These goals were largely driven by the passage of the Inflation Reduction Act (IRA).

As we will describe below, RGGI needs to implement a revised rule as soon as possible to provide adequate and immediate signals to the market to further reduce emissions within the electricity sector. Without this outcome, these necessary generation changes may be delayed or at worst never occur.

Mercuria recommends RGGI do the following in this rulemaking:

- Implement the rule change as soon as possible
- Net-zero by 2035 is the best option
- Supply scenarios could be merged if needed
- Revise the Emissions Containment Reserve and Cost Containment Reserve trigger prices
- Caps should be aligned to the existing adjusted cap

Implement the rules as soon as possible

RGGI cannot afford to wait any further on this program review, and any delay in implementing the rule would postpone reductions that could have meaningful impacts on communities within the RGGI states in the near term.

In all of RGGI's recent workshops, the program appears to be implementing changes in 2026 rather than 2025. There is no reason to delay implementing any rule until 2026 if the states intend to have a final model rule done in 2023.

By implementing as soon as possible, RGGI would ease the slope of the cap decline to net zero, which would give emitters more time to transition to low-carbon or carbon-free sources. This would also immediately rebalance the market and put the states on a trajectory to achieve their goals.

A model rule implemented as soon as possible would also allow states to tap into federal dollars.

Net-zero by 2035 is the best option

At the September workshop, RGGI contemplated net zero by 2035 or 2040 after ruling out some less stringent goals, with officials saying the passage of the IRA helping to make these goals more attainable.

Based on RGGI's initial modelling, Mercuria believes the most prudent approach would be to implement the net zero by 2035 supply scenario.

Pricing modelling from the September meeting showed net zero by 2040 would led to prices below the current ECR trigger prices. If that outcome were to occur, the ECR would remove volume automatically from quarterly auctions, likely setting up more stringent caps than initial contemplated.

Other emissions markets, including California's cap-and-trade and low carbon fuel standard, have shown innovation being spurred by setting aggressive climate goals. RGGI should be no different as aggressive goals can be met by a wave of new innovation and investment.

Cap scenarios could be merged if needed

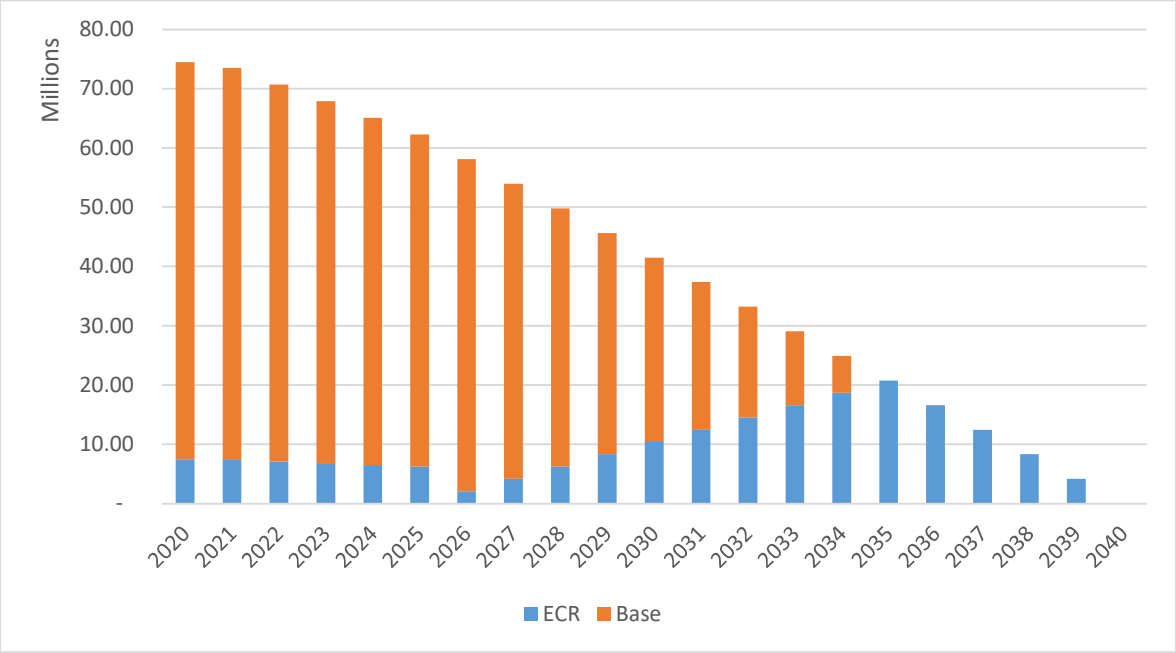
RGGI should also not see the cap scenarios as a completely binary choice between two supply options. This could limit the potential outcomes from this regional emissions market, and this lack of flexibility could stunt future investment to decarbonize the grid.

The program already has the tools to implement a more dynamic program via the ECR. Because of the uncertainty in the coming decade, RGGI should seek to optimize the program for the near term and the long term.

The states could position the ECR to merge the two net-zero scenarios, and this approach could allow the states to achieve net zero either in 2035, 2040 or any year in between. This strategy could allow the market to flex or tighten when needed, and it would drive investments within this space.

Figure 1 shows a merged cap scenario with the orange bars representing the base cap – net zero by 2035 supply scenario – and the blue bars representing the annual difference compared to net zero by 2040. After 2035, all volume would be available at auctions only if the settlement is over the ECR trigger price.

Figure 1



This approach would move away from the ECR being a set percentage of the annual cap, which is likely more prone to error. By enacting this strategy, the states could account for growing uncertainty in the market towards net zero, while also providing a strong price signal for further emissions abatement.

As discussed further below, this approach would only work if the states revised the ECR and CCR trigger prices. Without changing these figures, the states may limit market signals to further decarbonize the electricity sector.

ECR, CCR trigger prices should be revised

RGGI should commit to raising the ECR and CCR prices as the current levels may not encourage a switch to less carbon-intensive generation.

With little coal generation remaining in the RGGI region, the program needs to focus on incentivizing a shift to renewable power or more efficient natural gas-fired sources. Both would require prices higher than the current level.

At the current levels, the RGGI program may not provide the right incentive to shift to cleaner or renewable generation sources, because the CCR trigger price may be tapped too soon to encourage this innovation.

For some perspective, Washington and California's first cost containment point is nearly $52 with a floor price close to $22. California is evaluating whether the cost containment prices need to be raised towards 2030 to ensure that volume is not tapped too soon.

RGGI can afford to increase the ECR and CCR prices as these trigger prices could unlock further decarbonization, while also provide necessary cost containment. The impact of a higher CCR price would also diminish as the grid got cleaner.

RGGI may also reconsider whether the CCR should remain above the cap as this would allow the program to emit more than the annual cap.

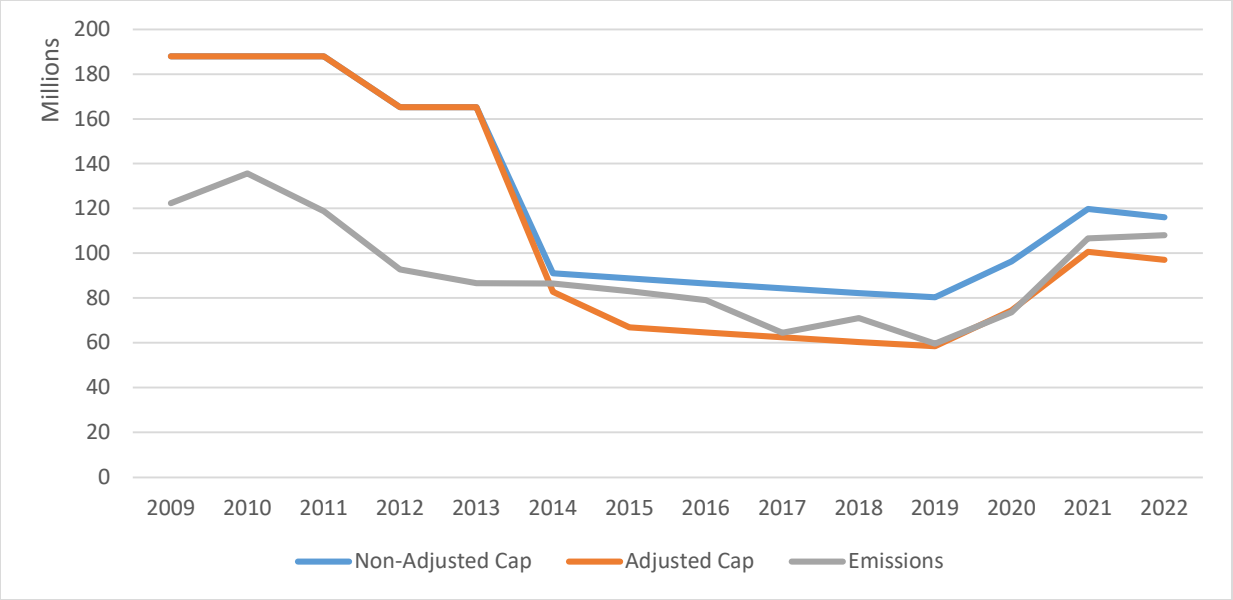
Other programs, such as the California cap-and-trade program, reserves a small percentage of all caps as a cost containment mechanism. This set volume provides relief when necessary, but the structure also ensures the state achieves it climate goals.

Caps should be aligned to adjusted cap or RGGI should implement bank adjustment

To address the large oversupply in the market, RGGI has adjusted the regional cap since 2014, but there is no reason to continue this process.

As Figure 2 shows, RGGI emissions have tracked closer to the adjusted cap in recent years than the non-adjusted cap. This chart shows the grid has continued to innovate, and a more logical cap trajectory would be to begin from the adjusted caps.

Figure 2



By starting from the adjusted cap, the states could provide a clear cut signal that emissions need to decline quickly over the coming decade to achieve net zero. This would also minimize future regulatory action as the future supply would be more aligns to current emissions trends.

If needed – future bank adjustments could be more dynamic

Mercuria firmly believes the best supply approach would be to begin from the adjusted cap, but if RGGI intends to maintain the existing non-adjusted cap with a bank adjustment approach, we believe there is a better way to address the surplus bank.

RGGI has historically implemented a bank adjustment based on the surplus after a three-year compliance deadline and the duration of time of the supply revision. For the 2021-2025 period, this set figure is 19.1 million allowances.

As the past decade has shown, this approach can allow the surplus to linger for years, as carbon abatement opportunities lower emissions that ultimately minimize the impact of the fixed bank adjustment concept.

If RGGI intends to move to annual compliance periods during this review, a future bank adjustment could be reset after each subsequent annual compliance deadline to ensure the surplus continues to be drawn down.

As an example, RGGI opts for a 20-million annual adjustment over a theoretical five-year period, which translates into a 100-million surplus. In the first year, the total bank is drawn down to 90 mln by the end of the year. This 90-mln bank would be reset to a 22.5 mln bank adjustment for the follow four years.

While this is a potential solution, the best option would be to set annual caps based on the adjusted caps to minimize the future need for regulatory action by the states.

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Conclusion

The US has increasingly felt the tangible effects of climate change first hand since the last RGGI program concluded, and the future climate outlook only looks bleaker.

Mercuria believes RGGI must move quickly to enact changes to this program to rapidly incentivize the shift to a net zero electricity grid by 2035. This climate action cannot wait until 2026.

While immediate action is critical, RGGI has an opportunity to further refine its existing program by realigning the caps to the adjusted caps and resetting the ECR and CCR triggers to unlock additional carbon abatement within the region.

RGGI also has an opportunity to innovate with caps that decline by net zero by 2035.

Mercuria appreciates this opportunity to comment on this program review, and we are happy to provide additional details if needed.

Sincerely,

Andrew M. Davis

Managing Director