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Maryland CO₂ Budget Trading Program

Air and Radiation Administration

January 6, 2020

Background

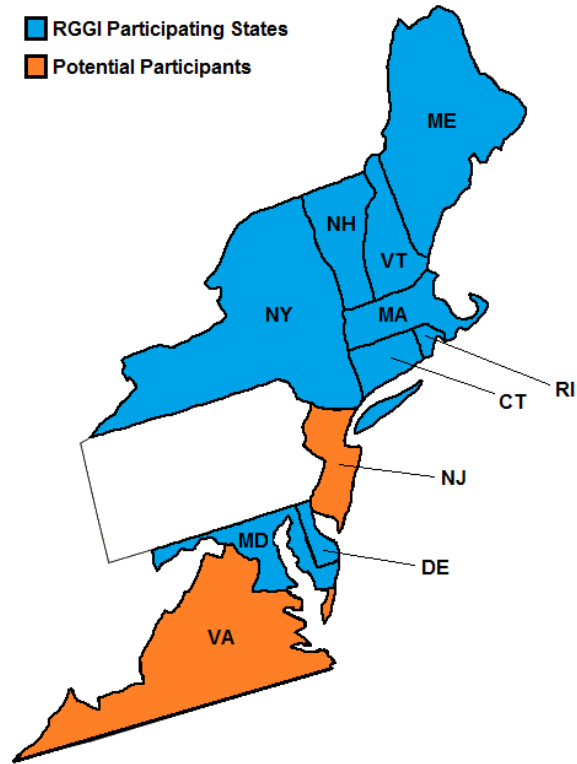
Regional Greenhouse Gas Initiative (RGGI)



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RGGI Basics

- Maryland officially became the 10th member of RGGI on April 20, 2007
- RGGI is a regional cap and invest program focused on reducing carbon dioxide (CO₂) emissions from power plants
 - Cooperative 10 state effort
 - Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, Rhode Island, Vermont
 - New Jersey was originally a member but has returned to the program
 - Pennsylvania and Virginia are currently potential participants
- Not your “typical” cap and invest program
 - CO₂ reductions achieved by reduced demand, not “scrubbers” or other end-of-the-pipe pollution control technologies
 - RGGI reductions to be achieved by
 - Setting a cap for the region
 - Auctioning allowances
 - Using auction proceeds to create incentives for energy efficiency and reduced demand
- Will result in a small, but positive benefit to Maryland electricity consumers



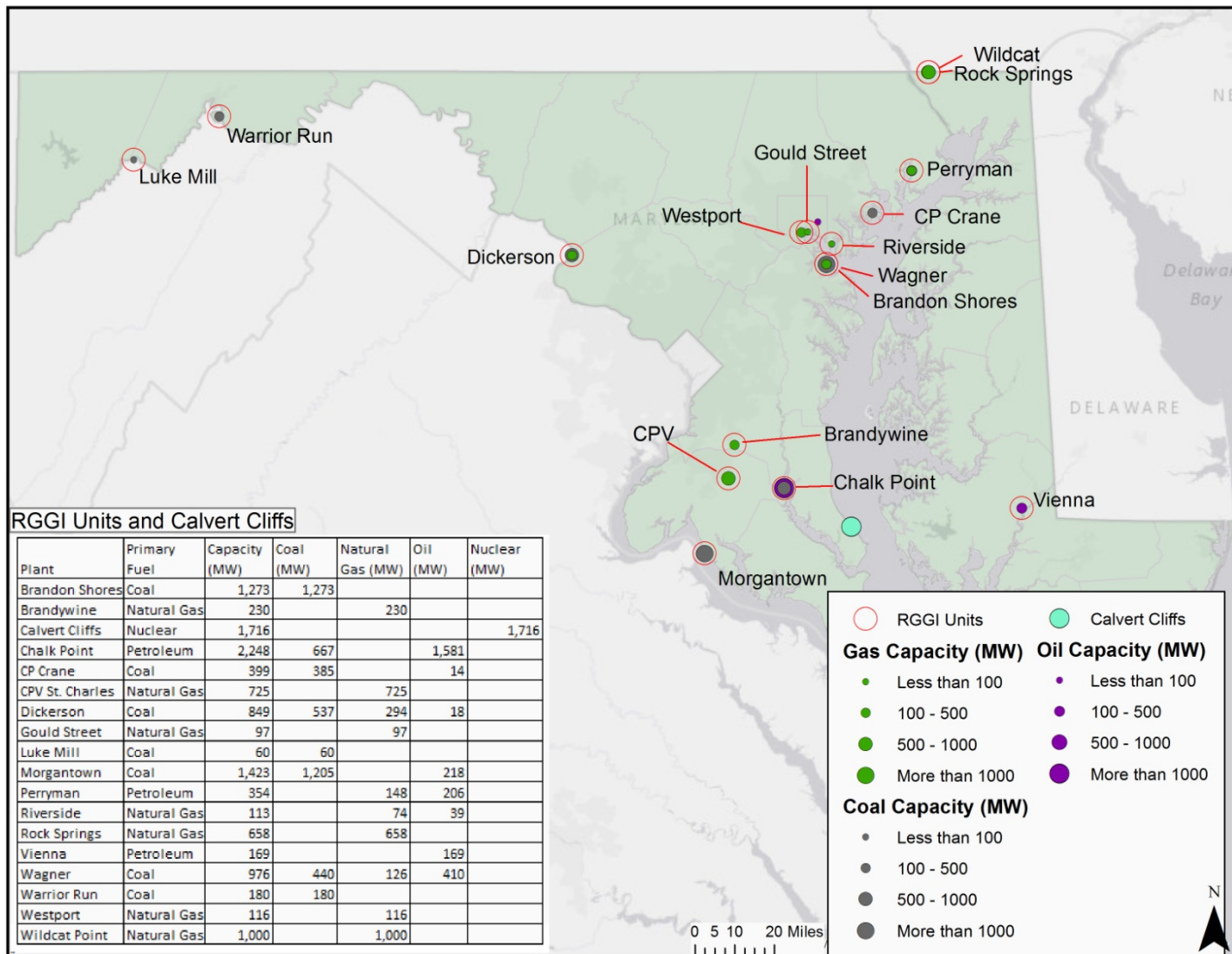
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Original RGGI Goals

- Original RGGI goal was to show that a cap and invest program for CO₂ was possible
 - Modest reduction goal
 - Proactive concept to provide revenue for energy efficiency programs and to cover cost of program through sale of allowances
- Generation-based Program
 - Each state apportionment set at average 2000 - 2002 emissions
- 10% Reduction Goal
 - Offset growth in emissions and make a small reduction



MD RGGI Units



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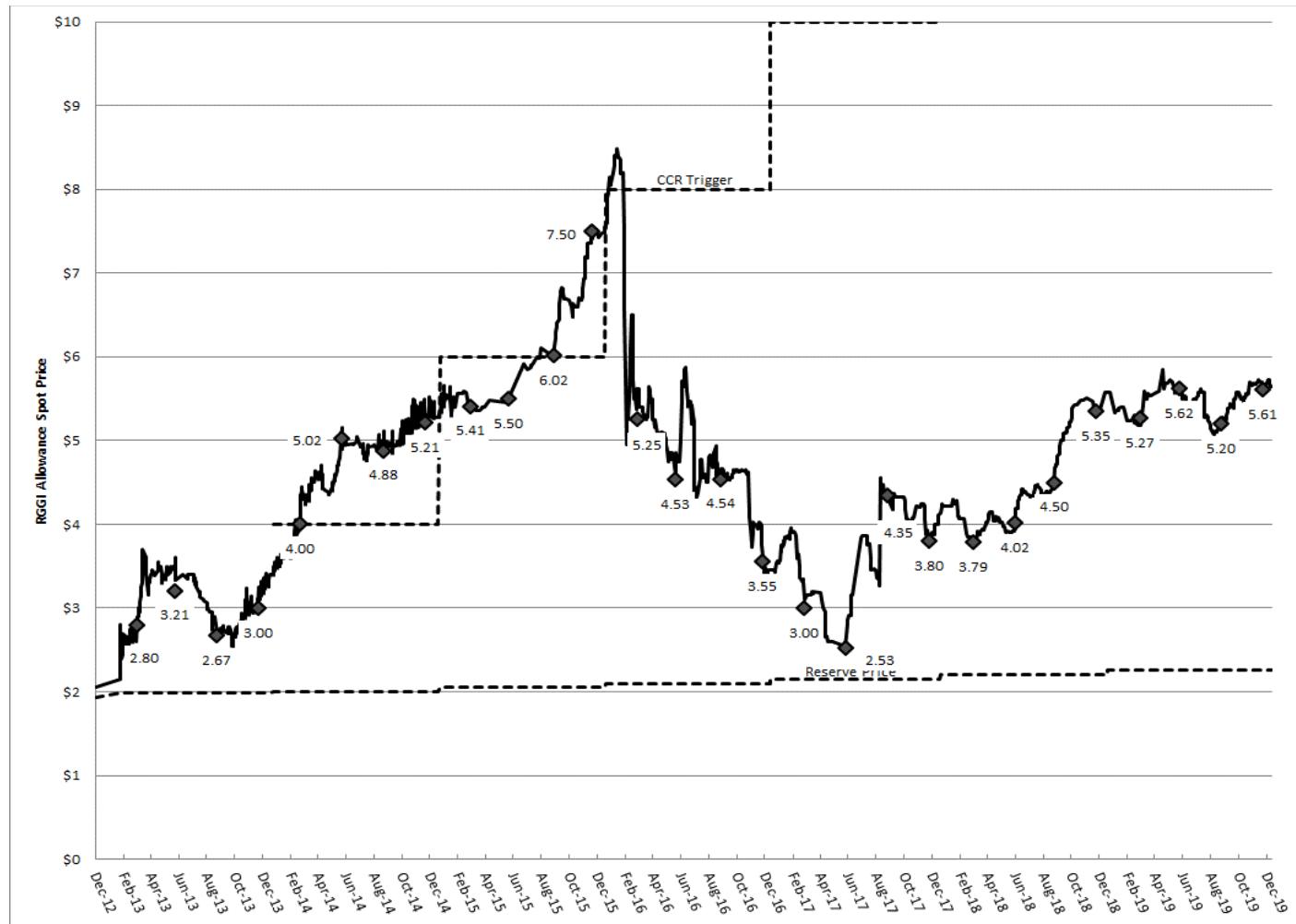
Auctions

- Primary and Secondary market auction platform
- Participation in all 42 quarterly auctions to date
- Total amount of proceeds from RGGI auctions more than \$3 billion
 - \$687.2 million for Maryland
- Strategic Energy Investment Fund (SEIF)
- Cost Containment Reserve
- Auction 43 to be held on March 11, 2020

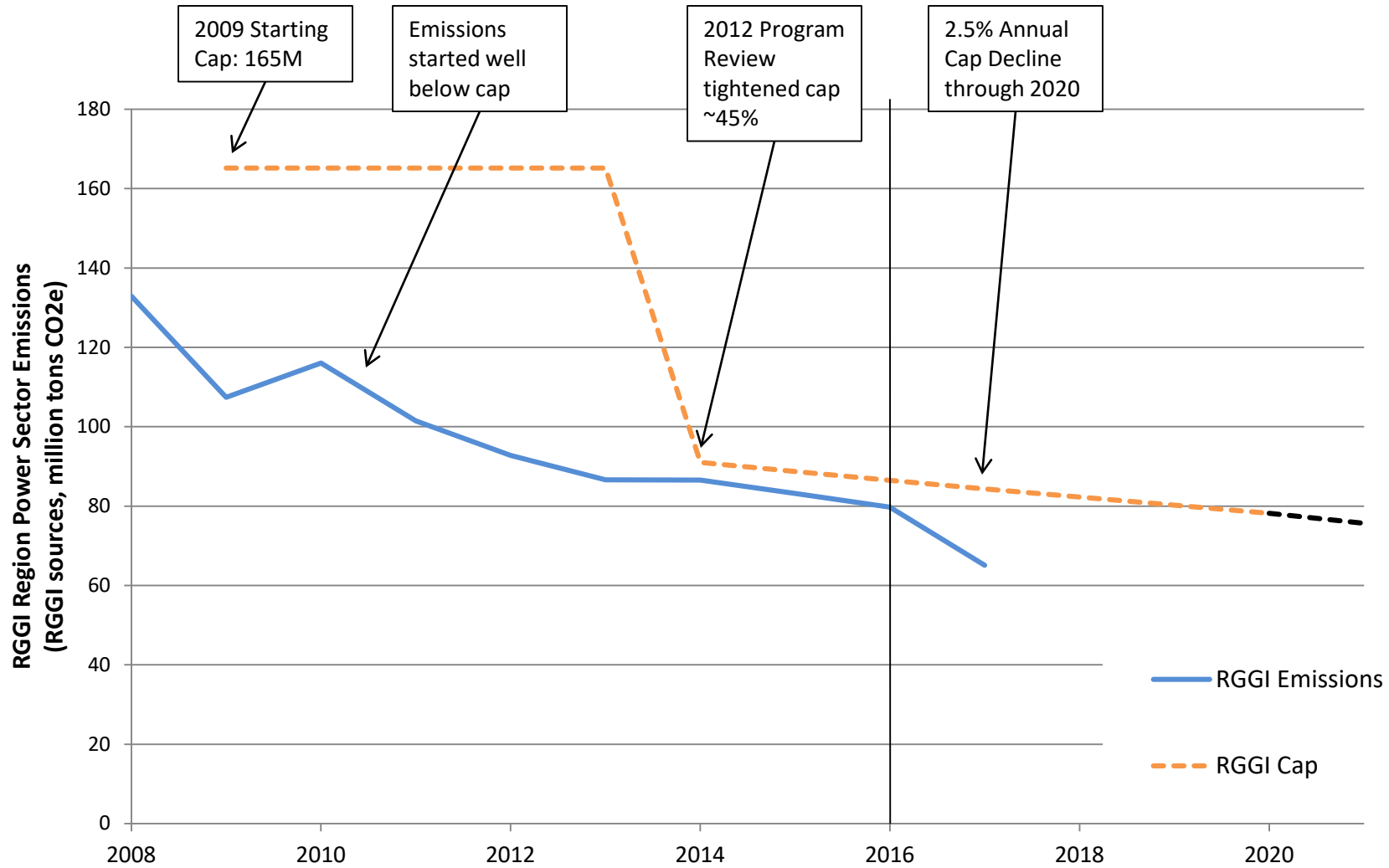


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RGGI Prices



2012 Program Review Cap Change



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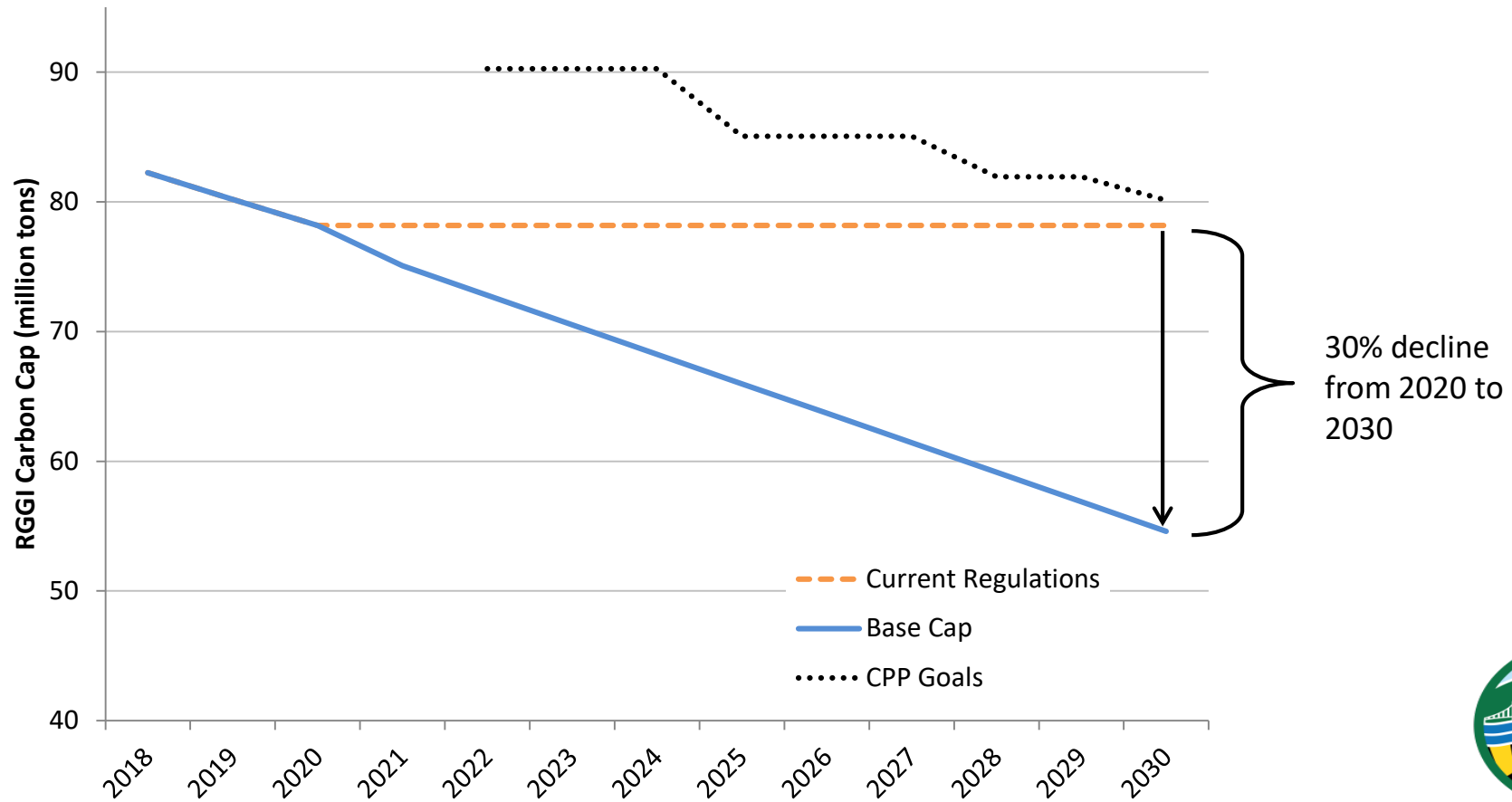
2016 Program Review

- 2016 Program Review followed the same format as the 2012 Program Review
- On behalf of the RGGI states, RGGI, Inc. facilitated public stakeholder meetings to gather stakeholder input for the states' 2016 Program Review
- 2016 Program Review solicited stakeholder input on RGGI program design elements, including considerations for compliance under the EPA Clean Power Plan
- RGGI states also held state-specific stakeholder meetings
- RGGI states engaged in routine private conferences to review and reach a consensus on any changes to



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2016 Program Review Cap Changes



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RGGI Update to Cost Containment Reserve (CCR)

- The Model Rule contains language for the continued use of a CCR
 - Provides flexibility and cost containment for the program
 - Consists of a fixed quantity of allowances, in addition to the cap
 - Held in reserve
 - Only made available for sale if allowance prices exceed predefined price levels



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RGGI Rule Update to CCR cont.

- The Model Rule contains language for an annual CCR allowance quantity of 10% of the regional cap beginning 2021 and each succeeding year thereafter.
- The CCR allowances would be made available immediately in any auction in which demand for allowances at prices above the CCR trigger price exceeds the supply of allowances offered for sale in that auction prior to the addition of any CCR allowances.
- If the CCR is triggered, the CCR allowances would only be sold at or above the CCR trigger price.
- The CCR Trigger Price will be \$13.00 in 2021 and rise at 7% per year, so that the CCR will only trigger if emission reduction costs are higher than



Maryland CCR Trigger Price

- COMAR 26.09.01.02B(34-1)
 - “CO₂ cost containment reserve trigger price, or CCR trigger price”
- Definition added explaining how the CCR trigger price is calculated and what the CCR trigger price shall be for years 2017 through 2030.
 - 2017: \$10.00
 - 2018 to 2020: 1.025 multiplied by the CCR trigger price from the previous calendar year (rounded to the nearest whole cent)
 - 2021: \$13.00
 - 2022 to 2030: 1.07 multiplied by the CCR trigger price from the previous calendar year (rounded to the nearest whole cent)



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RGGI - Emissions Containment Reserve (ECR)

- The Model Rule contains language for the creation and use of an ECR
 - Responds to supply and demand in the market if emissions reduction costs are lower than projected
 - States will withhold allowances from circulation to secure reductions if prices fall below established trigger prices
 - Allowances withheld will not be reoffered for sale



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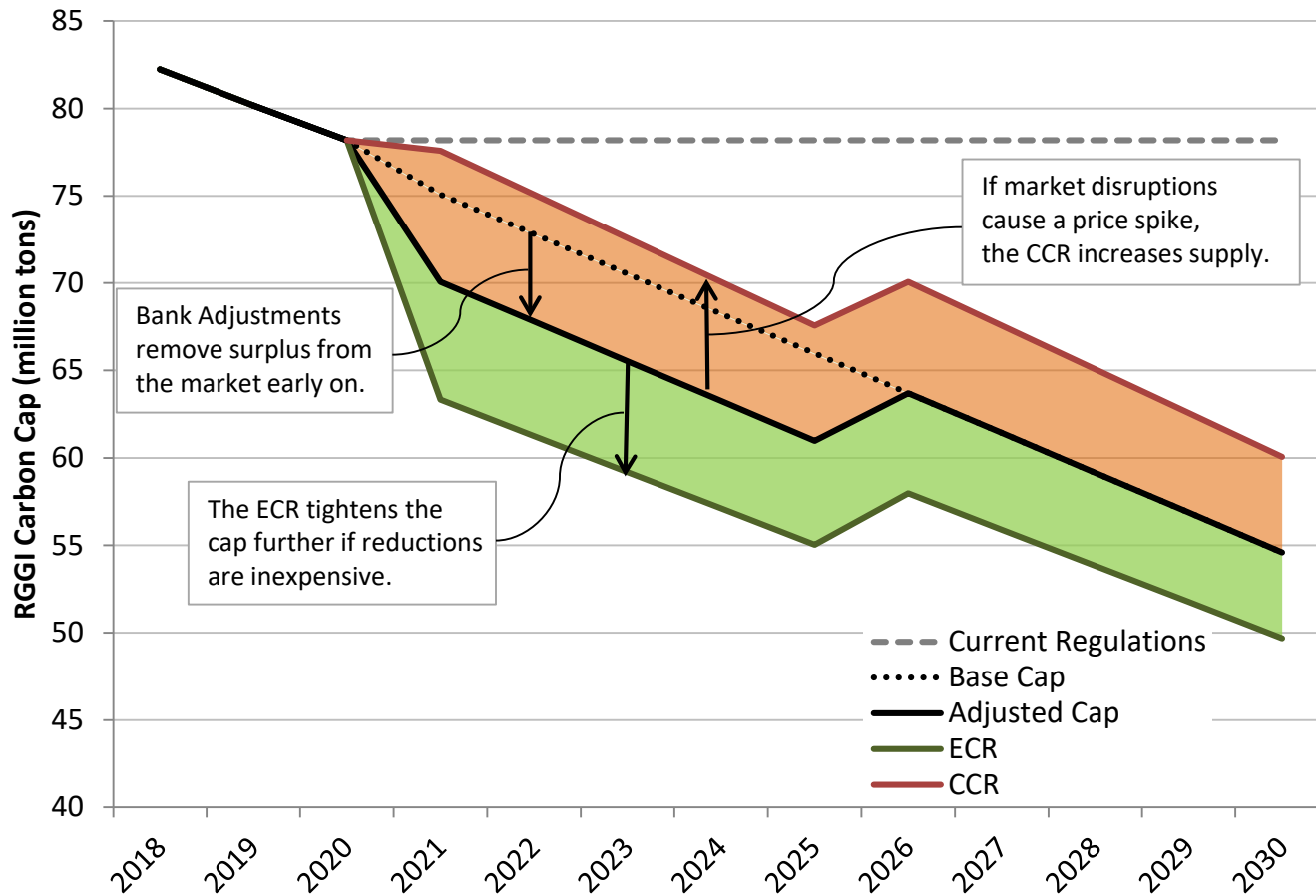
RGGI Rule Update to ECR cont.

- The Model Rule contains language for an annual ECR allowance withholding limit of 10% of the budgets of states implementing the ECR.
- The ECR trigger price will be \$6.00 in 2021, and rise at 7% per year, so that the ECR will only trigger if emission reduction costs are lower than projected.



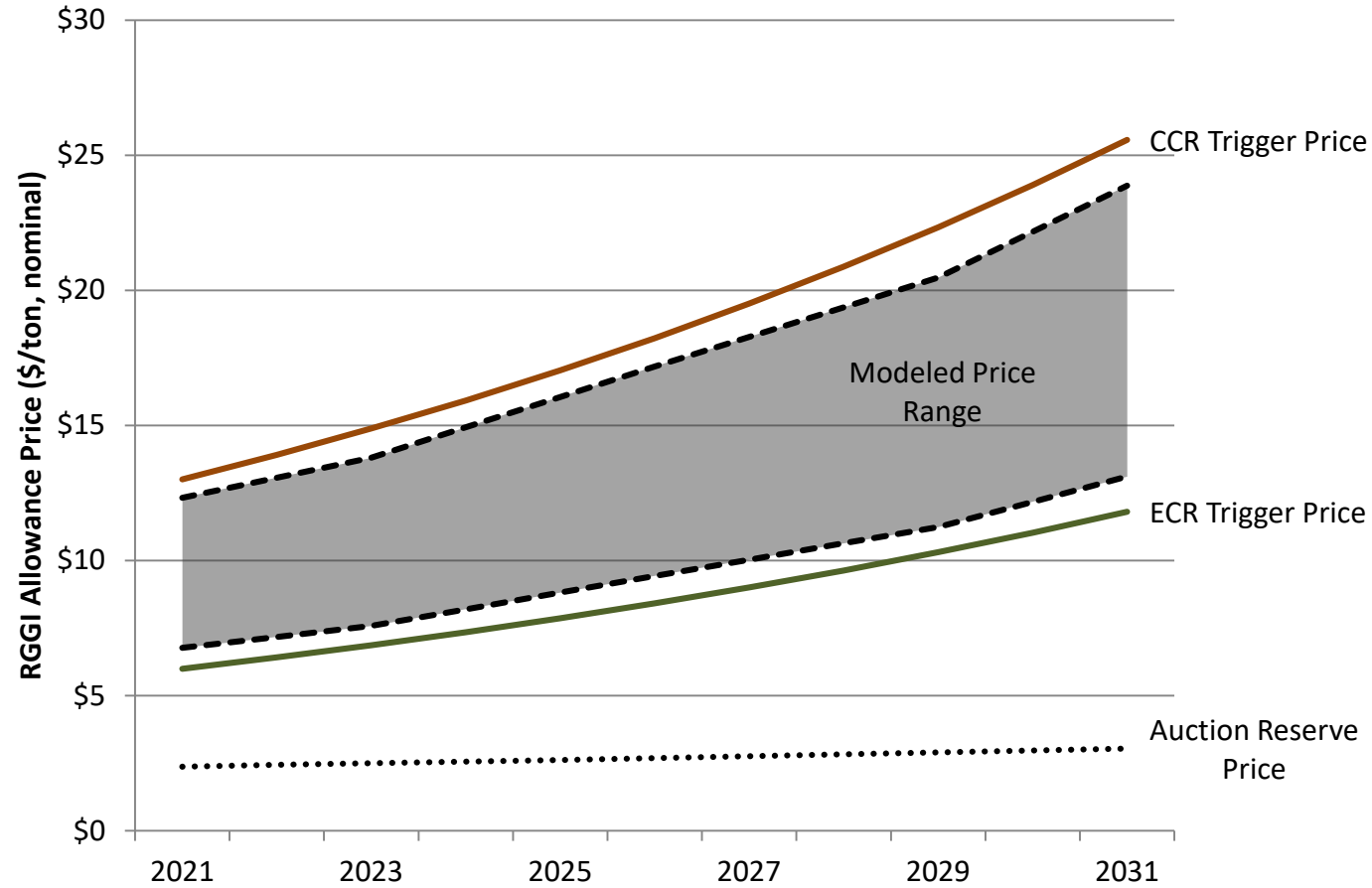
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Adaptive Cap



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CCR and ECR Price Triggers



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Maryland Budget Adjustments

- COMAR 26.09.02.03H
 - Third Adjustment for Banked Allowances.
- On March 15, 2021, the Department shall establish the third adjustment for banked allowances quantity for allocation years 2021 through 2025.
 - Formula included to account for potential future changes to program/budgets.



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Maryland Budget Adjustments

- COMAR 26.09.02.03J
 - General Distribution of CO₂ Allowances.
- Changes reflect recent regulatory updates to the allocations of the Voluntary Renewable Set-Aside Account and Clean Generation Set-Aside Account.



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Limited Industrial Exemption Set-aside Account Allocation

- COMAR 26.09.02.03J(3)(a)
 - The allocation of CO₂ allowances to the Limited Industrial Exemption Set-aside Account will change to the following values:
 - 2018: 3,465,101 allowances
 - 2019: 2,976,734 allowances
 - 2020: 2,488,367 allowances
 - 2021 and each succeeding calendar year: 2,000,000 allowances
- 26.09.02.06G
 - “After the Department has retired CO₂ allowances from the Limited Industrial Set-aside Account for the preceding calendar year, the Department shall supplement the remaining allowances in the account by transferring from the Consumer Energy Efficiency Account the number of allowances needed to restore the balance of the Limited Industrial Set-aside Account to the amount described in Regulation .03J(3)(a) of this chapter for that calendar



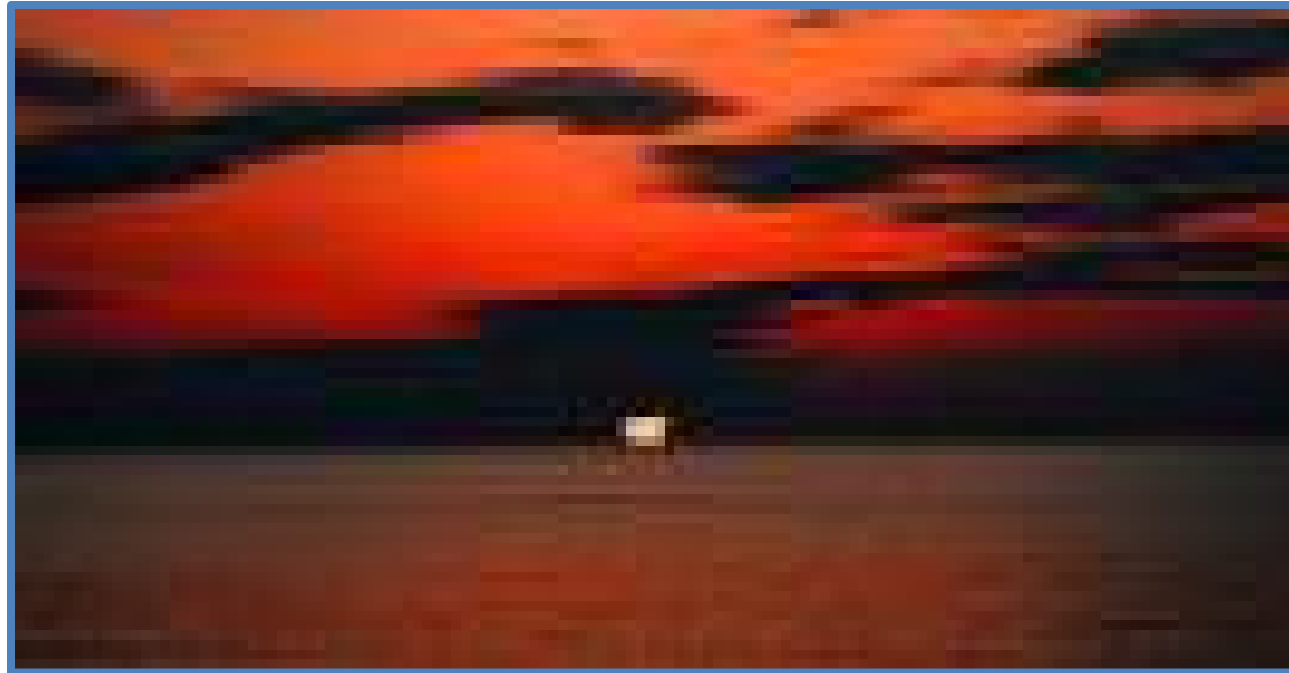
Long Term Contract Set-aside Account Purchase Limitation

- 26.09.02.07C
 - “The number of allowances purchased from the Long Term Contract Set-aside Account by an applicant may not exceed the equivalent tons of CO₂ that the applicant emits in the prior calendar year.”



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Questions?



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