

**TO:** Connecticut Department of Environmental Protection  
**FROM:** Northeast Regional Greenhouse Gas Coalition<sup>1</sup>  
**DATE:** March 9, 2007  
**RE:** Comments and Recommendations Regarding RGGI Rulemaking in Connecticut

## **Introduction**

This memo provides the Northeast Regional Greenhouse Gas Coalition's (GHG Coalition) recommendations for consideration by the Connecticut Department of Environmental Protection (CT DEP) as it develops its pre-proposal to implement the Regional Greenhouse Gas Initiative (RGGI) in the State.

The GHG Coalition members have participated as official stakeholders to the RGGI process since its inception, participating in every RGGI meeting and workshop and submitting consensus recommendations throughout the entire process. See [www.ghgcoalition.com/resources](http://www.ghgcoalition.com/resources) for comments submitted to the RGGI process to date.

The GHG Coalition recognizes that RGGI is the first of its kind cap and trade program addressing CO<sub>2</sub> emissions in the U.S. and that it is a first step in an otherwise long-term transition to a lower carbon economy. In order for this transition to be cost effective, the GHG Coalition continues to advocate for reasonable allowance allocation methodologies in each RGGI state, a policy to address electricity imports and the associated emissions leakage and more reasonable offset rules.

The GHG Coalition views investments in energy efficiency, renewable, non carbon emitting technologies, and carbon abatement technologies as crucial to the development and deployment of new technologies to reduce CO<sub>2</sub> emissions – but not at the expense of a cost effective program.

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<sup>1</sup> For more information see <http://ghgcoalition.com>

The GHG Coalition's is concerned with the emerging trend in the RGGI states in support of a 100% auction of the state's RGGI CO<sub>2</sub> emissions budget. The GHG Coalition does not support a 100% auction, particularly at the start of the RGGI program in 2009. The GHG Coalition does not support a 100% auction for the following reasons:

1. The impacts on allowance prices and electricity markets are unknown;
2. Participation in the auction by traders will likely increase uncertainty for CO<sub>2</sub> Budget Sources and increase allowance prices;
3. CO<sub>2</sub> Budget Sources would operate under increased uncertainty;
4. The competitive disadvantages for CO<sub>2</sub> Budget Sources Covered by the RGGI Program would likely increase; and
5. The impacts of the RGGI program on companies are potentially the greatest under a 100% auction.

### **GHG Coalition Concerns with 100% Auction at the Outset of RGGI**

#### ***1. The Impacts on Allowance Prices and Electricity Markets are Unknown.***

A 100% auction of allowances has never been implemented before in an emissions cap and trade program anywhere in the world. Therefore, the allowance price and electricity market impacts of a 100% auction approach are unknown. Moreover, unlike previous cap and trade programs, there are no commercially available CO<sub>2</sub> control technologies that act as an allowance market alternative or "back-stop" to the program. This will limit allowance market liquidity and drive up prices. A 100% auction would most likely exacerbate these allowance market concerns.

The price of RGGI CO<sub>2</sub> allowances will likely be greater under a 100% auction than if the auction was smaller combined with a direct allocation or sale to CO<sub>2</sub> Budget Sources. The natural tendency will be for CO<sub>2</sub> Budget Sources to bid more for allowances in the auction in order to ensure that they have a successful bid versus their competitors and any traders. This will only increase the price for RGGI allowances, drive up compliance costs, and increase the customer price impacts.

There are only two domestic cases of allowance auctioning that the GHG Coalition is aware of – neither of which involves a 100% allowance auction. They include the Acid Rain Program and the NOx program in Virginia.

As part of the Acid Rain Program, EPA holds annual auctions of allowances for a small portion of the total allowances allocated each year (2.8 percent). EPA returns proceeds and unsold allowances from the auction on a *pro rata* basis to those units from which EPA originally withheld allowances to create the auction.

As part of its NOx program, Virginia held a one-time auction for a small number of NOx allowances (5% of Virginia’s 2004 and 2005 vintage allowances). This limited experience with the NOx auction indicates that allowances prices were higher than the over the counter prices and that there were a limited number of winners in the auctions. Virginia sold 1,855 2004 vintage allowances for 3.3% over the market price. There were 19 bidders and 10 winners. Virginia also sold 1,855 2005 vintage NOx allowances for 7% over market price at that time. There were 17 bidders and 5 winners. All of the revenue went to the Virginia General Fund.

Recently introduced legislation in the 110<sup>th</sup> Congress includes auction provisions, but none start at 100% like RGGI. For example, The Electric Utility Cap-and-Trade Act of 2007 (S. 317) proposes to initially distribute 85% of the allowances at no cost to the electric generating sector in 2011. The remaining 15% of the allowances would be auctioned. From 2012 to 2031, the auction percentage would increase by three percent annually (and the free allocation percentage would decline accordingly). For calendar years 2032-2036, the auction percentage increases by five percent annually, until reaching 100 percent auction in 2036.

On January 9, 2007, the Oregon Carbon Allocation Task Force delivered to the Governor its recommendations for a load based CO<sub>2</sub> cap and trade program for the electricity load serving entities in Oregon.<sup>2</sup> According to the proposal, the state would initially allocate 95 percent of the allowances to the LSEs for free and auction a minimum of 5 percent of the total allowances each year, divided between two auctions a year. The percentage of auctioned allowances could

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<sup>2</sup> See [http://www.oregon.gov/ENERGY/GBLWRM/docs/CATF\\_Proposal.pdf](http://www.oregon.gov/ENERGY/GBLWRM/docs/CATF_Proposal.pdf)

increase to up to a total of 10 percent. Only covered entities could participate in the auction. The auction would set one final price for all allowances in that auction.

## ***2. Participation in the Auction by Traders Will Likely Increase Uncertainty for CO<sub>2</sub> Budget Sources and Increase Allowance Prices.***

Some RGGI states have proposed that the auctions will be open to any individual or entity that meets reasonable minimum financial requirements. If entities other than only CO<sub>2</sub> Budget Sources and their agents are permitted to participate in the auctions, this will allow any entity to buy allowances. At this early stage with a new allowance market and auction mechanism, allowing any entity to buy allowances could result in significantly higher auction prices for CO<sub>2</sub> Budget Sources. Firms without a compliance obligation will be competing with budget sources for allowances purely based on financial motivations. They will purchase allowances in order to sell them to budget sources at a profit. This will artificially drive up allowance prices.

An auction of allowances on this scale has not yet been conducted, and it makes sense to start slow by limiting the initial auction to CO<sub>2</sub> Budget Sources only (trading entities would be able to participate in any trading that develops afterwards). Another advantage to going slowly in transitioning to an auction is that if RGGI does not get the auction design “right” the approach can be adjusted without serious harm. With a new market for CO<sub>2</sub> allowances under RGGI, a 100% auction, participation by non CO<sub>2</sub> Budget Sources in the auction, the RGGI states are introducing a market that is ripe for manipulation and abuse.

## ***3. CO<sub>2</sub> Budget Sources Would Operate Under Increased Uncertainty.***

If 100% of the allowances are auctioned, there is no guarantee that existing CO<sub>2</sub> Budget Sources will have a successful bid in the auction. Also, there is no guarantee of allowance availability if CO<sub>2</sub> Budget Sources are unsuccessful in acquiring allowances through the auction. Since this is the case, if a budget source is not able to procure enough allowances, it may need to back down generation, which could present reliability concerns and create additional pressure to import power.

CO<sub>2</sub> Budget Sources can only plan investments efficiently if they understand compliance requirements and costs. The inability for CO<sub>2</sub> Budget Sources to optimize their investment strategy will add to the cost of compliance. Due to the added uncertainty associated with securing allowances under a 100% auction scenario, securing investment capital for new generation sources may also be more difficult. The region will require significant capacity additions over the next 5-10 years. Auctioning could make it more difficult to obtain the necessary financing for these investments.

#### ***4. The Competitive Disadvantages for CO<sub>2</sub> Budget Sources Covered by the RGGI Program Would Likely Increase.***

While competitive dynamics will change with the implementation of a CO<sub>2</sub> cap in the RGGI region alone, the quantity of allowances auctioned and the quantity that are allocated directly to CO<sub>2</sub> Budget Sources will further change the regional competitive market dynamics.

The RGGI CO<sub>2</sub> allowance price could alter the order of dispatch as well as drive up the MWh supply cost for CO<sub>2</sub> Budget Sources. Many CO<sub>2</sub> Budget Sources compete with electric generators that are not required to internalize the costs of CO<sub>2</sub> emissions. As a result, generating sources outside the RGGI region that serve RGGI region demand will increase their market share. As generating sources outside the RGGI region increase their market share, the anticipated CO<sub>2</sub> emission reduction benefits of the RGGI program will be lost due to increases in emissions outside the RGGI region associated with electricity imports. In addition to an increase in CO<sub>2</sub> emissions outside the RGGI region, NO<sub>x</sub>, SO<sub>2</sub>, and mercury will also increase.

In addition, generators outside the RGGI region will increase their profitability at the expense of RGGI CO<sub>2</sub> Budget Sources. If it is more profitable for generating sources outside the RGGI region, this will translate into more capital investment occurring outside the RGGI region as opposed to inside the RGGI region.

***5. The Impacts of the RGGI Program on Companies are Potentially the Greatest Under a 100% Auction.***

The uncertainty of a 100% auction also raises significant concerns with respect to the costs on individual companies within the RGGI region. The cost of reducing CO<sub>2</sub> emissions, as well as the cost of purchasing allowances will reduce the profits of CO<sub>2</sub> Budget Sources. Even under the best scenario, the impacts of an auction could result in the perverse consequence of benefiting companies who are operating outside of RGGI's jurisdiction.

A review of the recent Maryland RGGI analysis completed by Resources for the Future and the University of Maryland highlights the very impacts that RGGI states should be striving to avoid. In sum the report indicates that even at the 25% level of consumer benefit allocation, "profits of existing generators fall by 13 percent in 2010 and 12 percent in 2025, compared to the baseline."

A recent Resources for the Future Paper entitled, *Simple Rules for Targeting CO<sub>2</sub> Allowance Allocations to Compensate Firms*, explores rules for the initial distribution of emissions allowances that preserve all or some portion of the value of the firms, while maximizing the amount of allowances that can be allocated to other public purposes. The report evaluates combinations of free initial distribution to CO<sub>2</sub> Budget Sources in RGGI with an auction.<sup>3</sup>

The report notes that changes at the industry level mask the effects on individual firms, some of which gain value and some of which lose value under RGGI. The report notes that if it were possible to identify the winners and deny them compensation and thereby limit and target the free allocation of emissions allowances to firms that lose value it would be sufficient to limit free allocation to 34 percent of the allowances with the remaining 66 percent of the allowances auctioned.

The report also notes that in order to maintain a break-even value for all firms, it appears that about 77 percent of the allowances would need to be freely allocated leaving the remaining 23 percent of the allowances for auction. The report concludes that this finding is noteworthy as the

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<sup>3</sup> See <http://www.rff.org/Documents/RFF-DP-06-28.pdf>

RGGI MOU stipulates that states must dedicate at least 25 percent of the allowances for consumer benefit/strategic energy purposes.

### **GHG Coalition Recommendations**

The GHG Coalition recommends a more reasonable ‘phased in’ consumer benefit/strategic energy purpose allocation approach that does not rely on a 100% open auction at the outset of RGGI. As an alternative, the GHG Coalition recommends phasing in an auction coupled with the direct sale of allowances to existing and new CO<sub>2</sub> Budget Sources and a direct allocation to existing and new CO<sub>2</sub> Budget Sources. The direct sale and direct allocation of allowances should be based upon a State defined allowance allocation methodology. Going slowly in transitioning to a substantial auction would permit the auction design to be adjusted and provide greater business certainty to CO<sub>2</sub> Budget Sources.

First, the consumer benefit/strategic energy purpose allocation should start at a 25% in the First Compliance Period (2009-2011).

- The consumer benefit/strategic energy purpose allocation could then increase by a specified percentage per compliance period.
- This phase in should only occur if the comprehensive program review that the RGGI states agreed to in the RGGI MOU concludes that such a phase in is warranted and would not have adverse impacts.

Second, only a portion of the consumer benefit/strategic energy purpose allocation should be auctioned.

- The quantity of consumer benefit/strategic energy purpose allowances auctioned could increase by a specified percentage per compliance period.
- The auction should only be open to CO<sub>2</sub> Budget Sources or their agents, particularly in the First Compliance Period, to prevent undue market speculation at this early stage.
- The remaining consumer benefit/strategic energy purpose allocation should be made available for purchase by CO<sub>2</sub> Budget Sources (based upon a State defined allowance

allocation methodology) at the price per ton determined in the auction up to a predetermined escalating price cap.

Third, the remaining allowances should be “allocated” to CO<sub>2</sub> Budget Sources based upon a State defined allowance allocation methodology.

- A portion of the remaining allowances could be directly allocated to CO<sub>2</sub> Budget Sources free of charge.
- The remaining portion of the allowances could be sold directly to CO<sub>2</sub> Budget Sources (based upon a State defined allowance allocation methodology) at the price per ton determined in the auction up to a predetermined escalating price cap.
- The quantity of allowances sold directly to CO<sub>2</sub> Budget Sources could increase by a specified percentage per compliance period and the quantity of allowances directly allocated free of charge could decrease by a corresponding percentage.

Fourth, the GHG Coalition recommends that CT DEP outline in the pre proposal the specific percentage breakdown for the uses of the auction proceeds and revenue generated from the direct sale of RGGI allowances based on the RGGI MOU categories outlined below:

1. To promote energy efficiency,
2. To directly mitigate electricity ratepayer impacts,
3. To promote renewable or non-carbon emitting energy technologies,
4. To stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and/or
5. Fund administration of this Program.

This ‘phase in’ consumer benefit/strategic energy purpose allocation approach has several advantages including:

- greater probability that allowance prices will be moderate, while at the same time not adversely affecting the regional electricity markets;
- provides a transitional path to implement allowance auctions into cap and trade programs and provides business certainty to CO<sub>2</sub> Budget Sources;

- provides at least a portion of the allowance value to the companies (through a direct allocation), and can reduce the potential increases in electricity imports into the RGGI region; and
- is more realistic and easier to manage for all stakeholders if the auction design isn't "right".

We look forward to continued participation in the Connecticut RGGI process and thank you for this opportunity to provide input prior to the release of a pre-proposal.