

Comments on March 20th Stakeholder Meeting

April 3rd, 2012 – *Developed and endorsed by: ENE (Environment Northeast), Adirondack Council, Alliance for Clean Energy New York, Appalachian Mountain Club, Clean Air—Cool Planet, Connecticut Fund for the Environment, Conservation Law Foundation, Environment America, Environment Connecticut, Environment Maine, Environment Maryland, Environment New Jersey, Environment New York, Environment Rhode Island, Environmental Advocates of New York, Environmental Defense Fund, Natural Resources Defense Council, New York Public Interest Research Group, Northeast Energy Efficiency Partnerships*

Our organizations welcome the opportunity to submit comments on materials and proposals from the March 20th, 2012 stakeholder meeting, and we look forward to continuing engagement as states consider modifications of the regional emissions budget and price controls, economic modeling, and program operations.

The Regional Greenhouse Gas Initiative (RGGI) is the nation's leading example of a successful carbon cap and trade program, and we thank and congratulate you for your ongoing leadership in demonstrating the viability of market-based climate programs. As states undertake the 2012 Program Review it is important to recognize decline in emission to approximately one-third below the existing cap is an excellent outcome, and is consistent with other cap and trade programs where the environmental outcome is delivered more rapidly and at lower cost than anticipated. In order to take advantage of the emissions decline, policy makers must account for structural changes in the regional electric sector, specifically the decrease in the relative price of natural gas in relation to other fuels, the increase in non-emitting generation, and increased investments in energy efficiency across the region.¹ These structural changes show no sign of reversing,² and in order to adopt appropriate policy choices during the program review it is imperative that the reference case and sensitivities, as well as any policy scenarios, reflect these new circumstances accurately.

Policy Scenarios for Modeling

We commend states for initial steps to adapt RGGI to long-lasting changes in the regional electric sector, but the modifications proposed in the presentation of NYDEC's Lois New and ICF's Chris McCracken³ fail to achieve the fundamental objective of the program: to reduce emissions from current levels. Even under the most significant reduction in the emissions budget (to 106 million tons), emissions continue to increase through 2020.⁴ Nine of ten original RGGI states have legislative or executive obligations to reduce emissions (see Table 1), and in order to achieve these targets states must ensure that RGGI delivers real emissions reductions in the electric sector.

Table 1: Emissions reduction goals for RGGI states⁵

Connecticut	10 % below 1990 levels by 2020; 80 % by 2050
Maine	10 % below 1990 levels by 2020; 75-80% below 2003 long term
Maryland	25 % below 2006 levels by 2020
Massachusetts	25 % below 1990 levels by 2020; 80 % by 2050
New Hampshire	20% below 1990 levels by 2025

¹ NYSERDA's analysis of emissions from RGGI-regulated plants from 2005-2009 attributes 63.8% of the decline to fuel-switching, increased non-emitting generation and energy efficiency, see:

http://rggi.org/docs/Retrospective_Analysis_Draft_White_Paper.pdf

² Recent analysis of RGGI emissions trends and drivers by ENE (Environment Northeast) finds that fuel-switching, non-emitting generation, and efficiency investments caused 2011 emissions to fall an estimated 34% below the current cap, available at: <http://www.env-ne.org/resources/detail/rggi-emissions-trends-report-jan-2012>

³ Available at: http://rggi.org/docs/ProgramReview/March20/TPM-Modeling_030212.pdf

⁴ Id. – see slide 34 “Sources of Emission Reductions: 106 Cap CCR Reference with No Offsets”

⁵ Legislative and regulatory sources available at: http://www.pewclimate.org/what_s_being_done/targets

New Jersey	1990 levels by 2020, 80% below 2006 levels by 2050
New York	80 % below 1990 levels by 2050
Rhode Island	10% below 1990 levels by 2020
Vermont	25 percent from 1990 levels by 2012; 50 percent by 2028; and, if practical, 75 percent by 2050

In order for a revised RGGI to reduce electric sector emissions, states must address the large quantity of surplus allowances presently available for banking into the revised program. Private entities held 44 million allowances in excess of compliance requirements at the end of the first compliance period, and are projected to accrue an additional 47 to 53 million allowances before the adjustment of the allowance budget in 2014. This allowance “bank” could allow emitters to comply with RGGI without reducing emissions from present levels – unless states take one or a combination of steps to address the issue, potentially including:

- 1) Prohibit banking of surplus allowances from years prior to the adjustment of the emissions budget – this approach would allow RGGI to start from a ‘clean slate’ without the distorting impact of banked allowances on a revised program. So long as states provide adequate advance notice of the banking prohibition, emitters could moderate purchasing decisions to cover their emissions up to the point at which the cap is adjusted (currently proposed as January 1, 2014). If emitters hold limited quantities of allowances in excess of compliance requirements, those allowances could be bought back or converted to allowances drawn from the revised cap based on the price paid for allowances at the time of purchase.⁶

For Example: If an entity purchased 3,000 allowances at \$2/ton in 2013 and these allowances were not used for compliance or otherwise retired, and allowances cleared at \$6/ton in the first auction of 2014 allowances from the revised cap, the 3,000 allowances from 2013 could be traded in for 1,000 2014 allowances.

- 2) Reduce the updated allowance budget to compensate for projected allowance bank – states would subtract the total projected allowance bank from the revised cap, including allowances banked from the first compliance period and surplus allowances purchased in 2012 and 2013 before cap adjustment. The reduction would be spread proportionally over the duration of the new cap from 2014-2020.

For Example: If the revised emissions budget is set at 106MMT in 2014 and declines by 2.5% annually to 2020, the projected bank of 97MMT (44MMT from first compliance period and 53MMT from 2012-2013) would be subtracted from the total 2014-2020 emissions budget of 686MMT for a new total budget of 589MMT. Spreading the reduction of 97MMT over the duration of the new cap would create an initial budget of 92MMT in 2014, declining 2.5% annually to 2020.

While this approach does not require any change of banking provisions, it does rely on emissions modeling, which in the past has overestimated RGGI unit emissions. As such, a significant surplus of allowances could once more undermine RGGI’s effectiveness if projections again prove to be higher than actual emissions (which we believe likely given that conservative reference case assumptions do not accurately incorporate efficiency spending into load growth projections).

⁶ Prices paid for allowances can be tracked based on allowance serial numbers and auction clearing prices, both of which are tracked by RGGI, Inc. Also note that this sort of allowance conversion was proposed in federal climate bills to allow for conversion of RGGI allowances to federal allowances based on inflation-adjusted purchase value. H.R. 2454, Section 782(d), available at: <http://democrats.energycommerce.house.gov/index.php?q=bill/hr-2454-the-the-american-clean-energy-and-security-act>

- 3) Adjust allowance supply before the cap modification to minimize the future bank – under this approach at each auction before the budget adjustment states would offer quantities of allowances closely aligned to latest available information on compliance needs. Taking into account the 44MMT bank from the first compliance period, required allocations, and ongoing emissions, states could adjust the quantity of allowances offered at each auction in order to reduce the surplus of allowances carried over into 2014.

For Example: In advance of each of the remaining 7 auction before the end of 2013 states would evaluate recent emissions data and available allowances (including the current bank) to determine how many allowances to offer to ensure sufficient supply of allowances for compliance entities while minimizing the quantity of allowances that could be banked into the revised program.

This approach would mitigate some of the uncertainty associated with the dependence on modeling described in option #2, as it would allow states to adapt to changes in emissions trends and other factors over the remainder of 2012 and 2013.

We believe that modifying the supply of allowances to account for the surplus accrued to date is appropriate within a dynamic market-based program like RGGI, and is well supported by precedent from other market-based environmental programs. RGGI was established to reduce emissions from 2009 levels, and steps taken to achieve this objective are consistent with RGGI's goals and design. Due to unanticipated structural shifts in the regional electric sector, the current cap is insufficient to achieve emissions reduction objectives and additional measures are needed. Updating the allowance budget in 2014 is an essential step, but additional measures are needed to address the *current* surplus. With sufficient advance notice to the market, any or all of the steps above could be taken in ways that are consistent with smooth market function. Other market-based environmental programs have taken similar steps without undermining program effectiveness. Flow Controls in the Ozone Transport Commission (OTC) NO_x Budget Program restrict use of banked allowances when the bank grows larger than pre-determined thresholds.⁷ And in a near direct parallel from a much larger market-based climate program, EU member states are currently consider means to adjust the quantity of allowances offered at auction in recognition of the detrimental effects of surplus allowances on market function and environmental outcomes.

We recommend that each of the approaches described above be explored by the states in the next round of IPM modeling. The first two options should be easy to incorporate into the model, and option number 3 could be approximated by assuming that a small surplus of allowances from 2013 (e.g. 5% of the 2013 budget, or 8MMT) is sold by states in excess of projected emissions in order to provide a cushion for emitters.

Cost Containment Allowance Reserve

More detail is required to adequately assess the proposed cost containment allowance reserves, but initial information suggests that the reserve is larger than necessary and priced too low, both of which threaten to undermine RGGI's effectiveness. As described by Professor Brian Murphy at the January 24th learning session, a small supply of allowances is sufficient to meet incremental increases in allowance demand and suppress price increases, with a reserve of 1%-3% of the cumulative emissions limit sufficient to protect against price risk.⁸ The reserve proposed at the March 20th meeting would provide 10 million allowances each year of the seven years in the revised program, for a total of 70 million allowances – over 10% of the total “106 Cap.” As a point of comparison, the strategic reserve in California's cap and trade program is populated with 4% of the *total* allowance budget for program, providing a sufficient supply of allowances to dampen any price increase without undermining the

⁷ For additional detail see: <http://www.epa.gov/airmarkets/resource/docs/flowcontrolOTC.pdf>

⁸ See http://rggi.org/docs/ProgramReview/LearningSession2/Murray_120124.pdf

effectiveness of the program. In California the 4% of allowances are drawn from *within* the annual allowance budgets, ensuring achievement of the targets set by the program by annual cap levels. In contrast, the strategic reserve proposed for RGGI adds an additional 10 million tons of allowable emissions *on top* of each year's cap, potentially allowing emissions to increase by over 10% by 2020.

Additionally, the prices at which reserve allowances would be sold is far below reserve allowance prices in California and the Western Climate Initiative (WCI), potentially inhibiting linkage with WCI member jurisdictions and related benefits from a larger and more liquid market with greater quantities of cost-effective emissions reductions. We recommend that states model a reserve mechanism similar to California's with a smaller quantity (e.g. 4%) of allowances drawn from *within* the annual caps, and priced at levels consistent with the WCI (i.e. \$40/ton, increasing annually by 5% plus inflation). Any allowances that go unsold at auction should be placed in this reserve, consistent with the reserve mechanism in California. This cost control reserve should be included in runs of the 3 options described above for addressing the allowance bank.

Modeling Assumptions

When considering potential modifications of the RGGI program, states should base decisions on the most up-to-date information. Toward this end we recommend that states incorporate updated and accurate data sources into reference case and sensitivity assumptions. Most importantly, states should update load growth projections to account for new and/or increasing commitments to energy efficiency investments. Electricity demand is one of the most important drivers of RGGI region emissions, and it is essential that the model incorporate increasing energy efficiency investments that are reducing electricity consumption across the region. Most states are currently relying on RTO load forecasts, which provide an adequate starting point for demand assessments but do not adequately capture existing and new legal requirements at the state level that are significantly increasing investments in all cost-effective energy efficiency.

We believe that efficiency can be incorporated into the model most accurately by using updated 2012 RTO forecasts that are focused on economic trends, and layering additional efficiency requirements and investments on top of 2012 RTO forecasts. The importance of accounting for efficiency investments cannot be understated, as states ramping up to procure all cost-effective energy efficiency will achieve first year annual savings in excess of 2%. (This process is underway in ME, MA, RI, CT and VT.) NY and MD have also made significant new commitments to expand efficiency investments. The new draft ISO-New England Regional System Plan for 2012, for example, estimates that increased investments in state energy efficiency programs will offset load growth entirely in New England over the next ten years.⁹ We are encouraged by the incorporation of detailed information on MA's efficiency requirements and strongly encourage the incorporation of similar detailed inputs for all RGGI states.

In order to accurately assess the impacts of new cap levels, states should also account for investment of auction revenue in energy efficiency and other programs that affect electricity demand and emissions. States are currently investing over 50% of allowance revenue in energy efficiency, a proportion that will grow as programs are ramped up and allowance revenue is distributed according to state spending plans rather than supporting state budgets. Investments in efficiency have created significant consumer benefits and reduced demand for power, thus reducing load growth and wholesale electricity prices, and decreasing the cost of allowances. States should assume that modeling runs projecting higher allowance prices will lead to increased investments in efficiency.

⁹ See slide 29, at: http://www.iso-ne.com/committees/comm_wkgrps/othr/engry_effncy_frctst/frctst/2012/draft_final_ee_forecast_3_16_12.pdf

It is essential that RGGI improve on the modeling methodology by which it included energy efficiency in the original RGGI modeling some six years ago. There are much more nuanced and realistic ways that RGGI and ICF can include energy efficiency now. The “supply curves” for energy efficiency are far more developed now than they were then. Just as important, if not more so, the ability of the ICF IPM model to “co-optimize” transmission, generation and energy efficiency/demand response has also advanced. RGGI must take advantage of this opportunity to treat energy efficiency as a co-equal supply source with generation, while also advancing the ability to “tri-optimize” transmission, generation and energy efficiency/demand response.

States should also update other data sources available in the near future, including EIA’s 2012 Annual Energy Outlook for fuel prices and cost and performance of new generation and additional detail on federal environmental regulations.

REMI Modeling

We believe that concurrent analysis of electric sector and economy-wide impacts of policy reform options will help states identify changes that will bring the greatest benefits to the widest range of stakeholders. As states evaluate potential reforms to RGGI, macroeconomic modeling through REMI and electric sector modeling through IPM should be conducted and released in tandem, as the RGGI program is intricately tied to the broader economy.

When selecting and presenting REMI modeling runs we encourage states to devote particular attention to RGGI-funded investments in energy efficiency. During RGGI’s design phase electric sector and economic modeling played important roles in the decision to auction allowances and invest proceeds in energy efficiency. The wisdom of this approach was made clear in the recent Analysis Group report *The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States*, which found that investment of RGGI revenue in energy efficiency contributed the greatest portion of the \$1.6 billion in net benefits from the program.¹⁰ As states consider RGGI’s future, we recommend that macroeconomic modeling include:

- Increasing the portion of RGGI revenue invested in energy efficiency to 75%
- Increasing the portion of RGGI revenue invested in energy efficiency to 100%

Program Operations

Timely and sufficient provision of information is essential for stakeholder engagement, and we request that states provide detailed assumptions and modeling results well in advance of stakeholder meetings. We thank states for releasing modeling results and updated presentations as requested at the March 20th stakeholder meeting, but we request that such materials be released three weeks prior to meetings in order to allow stakeholders to best engage with state staff on program details.

Apart from data provisions, from our perspective RGGI operations have been functioning smoothly. Provision of emissions and allowance data through RGGI COATS makes possible important analysis of RGGI’s performance, and we support measures that increase data availability. Additional information on spending of RGGI auction proceeds would be helpful for capturing RGGI’s overall impact and has been limited to-date.

Thank you for your attention to these comments, and we look forward to continuing engagement on these issues in the future.

¹⁰ See: <http://www.analysisgroup.com/RGGI.aspx>