



Good for the Economy.  
Good for the Environment.

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May 9, 2016

VIA E-MAIL  
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### **To RGGI 2016 Program Review:**

On behalf of the New England Chapter of Environmental Entrepreneurs (E2), thank you for the opportunity to comment on the Regional Greenhouse Gas Initiative (RGGI) 2016 Program Review process. We found the April 29 Stakeholder Meeting to be highly informative and appreciate your efforts to address questions and concerns.

We write in support of strengthening RGGI to meet agreed upon state, federal and global climate change goals, which will also provide the necessary market signal for the growth of the clean energy economy. Specifically we urge you to:

- 1. Model a cap reduction of 5% per year from 2020 – 2030**
  - *This level is necessary for states to meet their individual climate goals*
- 2. Eliminate the damaging effects of the Cost Containment Reserve (CCR)**
  - *As currently constituted the CCR undermines the integrity of the RGGI program*
- 3. Maintain the region's leadership position**
  - *RGGI states are positioned to reap the benefits of the clean energy economy*

### **About E2**

Environmental Entrepreneurs (E2) is a national, nonpartisan group of business leaders, investors, and professionals from every sector of the economy who advocate for smart policies that are good for the economy and good for the environment. Our members have founded or funded more than 2,500 companies, created more than 600,000 jobs, and manage more than \$100 billion in venture and private equity capital.

### **The RGGI Opportunity**

RGGI is a groundbreaking program that has been remarkably successful in reducing harmful greenhouse gas emissions while providing a wealth of economic benefits to participating states. From 2009 to 2014, the RGGI states reduced power plant CO<sub>2</sub> emissions by 35% compared to 12% in other states (not including California, which has also achieved significant reductions by capping its emissions), even as the RGGI states' economies grew faster than other states.<sup>1</sup> During its first six years, the RGGI program generated over \$2.9 billion in economic value and added about 30,000 job years to the economy.<sup>2</sup>

<sup>1</sup> Acadia Center, The Regional Greenhouse Gas Initiative: A Model Program for the Power Sector, [http://acadiacenter.org/wp-content/uploads/2015/07/RGGI-Emissions-Trends-Report\\_Final.pdf](http://acadiacenter.org/wp-content/uploads/2015/07/RGGI-Emissions-Trends-Report_Final.pdf)

<sup>2</sup> [http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis\\_group\\_rggi\\_report\\_july\\_2015.pdf](http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_july_2015.pdf)



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The emission reductions are not by chance or due to exogenous factors. According to a recent analysis in Energy Economics,<sup>3</sup> *“RGGI states’ GHG emissions would have been 24% higher without RGGI” and “controlling for all other factors... about half of the region’s reductions can be attributable directly to the RGGI program.”*

A strong long-term RGGI cap will provide the regulatory certainty to enable the deployment of clean energy generation, creating jobs and maintaining our region’s leadership in clean energy.

To build on this record of success we urge the RGGI states to take the following actions:

**1. Model a cap reduction of 5% per year from 2020 – 2030**

- *This level is necessary for states to meet their individual climate goals*

As the chart below shows, each of the RGGI states has either pledged or mandated steep reductions in their economy-wide greenhouse gas emissions by 2030 and 2050. The average for the nine states is a 40 percent economy-wide reduction by 2030.

RGGI State	2030 Economy-Wide GHG Target	2050 Economy-Wide GHG Target
Connecticut	35-45% below 1990	80% below 2001
Delaware	30% below 2008	-
Maine	35-45% below 1990	75-85% below 2003
Maryland	40% below 2006	90% below 2006
Massachusetts	35-45% below 1990	80% below 1990
New Hampshire	35-45% below 1990	80% below 1990
New York	40% below 1990	80% below 1990
Rhode Island	35-45% below 1990	75-80% below 2002
Vermont	35-45% below 1990	75% below 1990

To reach these economy-wide goals, the electric sector will have to carry a large share of the reductions since other sectors will rely on low and zero emission power generation to decrease their emissions levels.

For example, the 2015 Update to the Massachusetts Clean Energy and Climate Plan for 2020 states: *“The only viable path to deep reductions in GHG emissions is through a combination of reduced energy consumption [and] expanded availability of clean electricity, and electrification of the transportation and heating sectors...The scope of the challenge can be summarized in three words: **reduce, electrify, and decarbonize.**”*<sup>4</sup>

The technologies to meet these challenges are available today and are cost competitive with conventional fuels while offering materially lower risk of availability constraints and price volatility.

[http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/economic\\_impact\\_rggi\\_report.pdf](http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/economic_impact_rggi_report.pdf)

<sup>3</sup> Why Have Greenhouse Emissions in RGGI States Declined? An Econometric Attribution to Economic, Energy Market, and Policy Factors; Brian C. Murray, Peter T. Maniloff, Evan M. Murray; Working Paper EE 14-01

<http://www.sciencedirect.com/science/article/pii/S0140988315002273>

<sup>4</sup> 2015 Update to the Massachusetts Clean Energy and Climate Plan for 2020, Page 50,

<http://www.mass.gov/eea/docs/eea/energy/cccp-for-2020.pdf>



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Since RGGI will likely serve as the compliance mechanism for RGGI states under the EPA Clean Power Plan (CPP), it is important to consider what the CPP would require. Analysis shows that most of the RGGI states would meet the EPA 2030 target by 2020 without further reductions beyond the 2020 level.<sup>5</sup> However, doing only as much as is required by the Clean Power Plan is not an option, since it would not allow states to meet their individual climate goals.

A recent Synapse report<sup>6</sup> shows that the most cost-effective way for RGGI states to achieve their economy-wide emission targets is for electric sector emissions to fall from 78 million tons in 2020 under the current RGGI cap to 39 million tons in 2030. This reduction would cut the region's electric sector emissions in half over this time period -- a reduction of approximately 5 percent per year. A cap at this level would be ambitious but achievable and would provide a powerful tool in helping states to meet their individual climate targets.

*It's important to note that a 5 percent annual reduction in the cap is exactly equivalent to the actual annual average carbon reductions in the region over the life of the program thus far.*<sup>7</sup>

Given that low-cost, zero emission power generation alternatives are available today, we strongly believe that the necessary reductions can be achieved with minimal cost impact while significantly reducing the price and availability risks associated with the use of fossil fuels.

*Thus, modeling a 5 percent per year decline in the cap is imperative since that is the level that is needed for the states to meet their individual 2030 climate goals cost-effectively.*

## **2. Eliminate the damaging effects of the Cost Containment Reserve (CCR)**

- *As currently constituted the CCR undermines the integrity of the RGGI program*

An important benefit that RGGI provides to the business and investment community is regulatory certainty that emissions will continue to decline over a long enough period to justify investments in new, cleaner energy alternatives. The current CCR puts the integrity of the program at risk.

The CCR was created to mitigate allowance price volatility by allowing new allowances to be created, over and above the cap level, when certain price levels are met (\$6/ton in 2015, \$8 in 2016, and \$10 in 2017, rising by 2.5 percent each year thereafter<sup>8</sup>). Due to these relatively low prices, the CCR has already allowed an additional 15 million tons of CO<sub>2</sub> into the atmosphere over and above the cap level. If the CCR remains in place as currently structured, up to 50 million additional tons of CO<sub>2</sub> could be allowed in from 2016-2020.

Since the entire cap for 2020 is only 78 million tons,<sup>9</sup> this would significantly undermine RGGI's performance – and the states' climate goals – by adding almost a year's worth of additional emissions to the atmosphere.

<sup>5</sup> [http://www.rggi.org/docs/ProgramReview/2016/11-17-15/Key\\_Discussion\\_Items\\_11\\_17\\_15.pdf](http://www.rggi.org/docs/ProgramReview/2016/11-17-15/Key_Discussion_Items_11_17_15.pdf)

<sup>6</sup> The RGGI Opportunity 2.0: RGGI as the Electric Sector Compliance Tool to Achieve 2030 State Climate Targets, March 2016, at <http://www.synapse-energy.com/sites/default/files/The-RGGI-Opportunity.pdf>

<sup>7</sup> Based on analysis of RGGI COATS Data, <https://www.rggi.org/market/tracking/public-reporting>

<sup>8</sup> <https://www.rggi.org/design/overview/cap>

<sup>9</sup> [ibid.](#)



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To prevent this problem, we urge the RGGI states to take immediate action by either eliminating the CCR completely (our preferred alternative) or else gradually taking the allowances from future years, as is done in the California Cap-and-Trade Program.

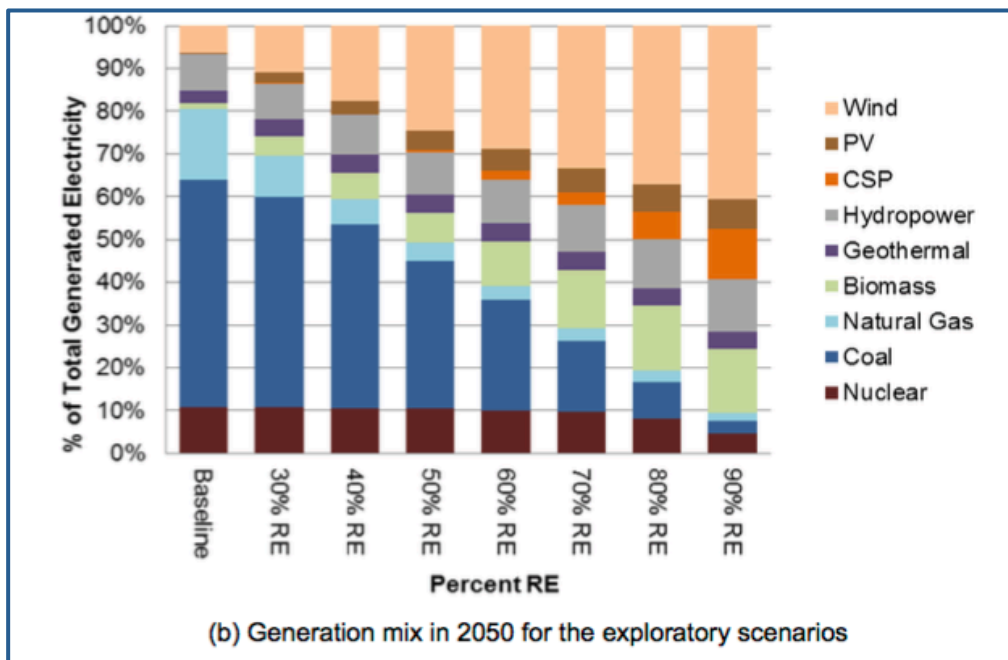
If the CCR continues, we also recommend raising the trigger prices. For comparison, the minimum floor price for allowances in California in 2016 was \$12.73/ton – nearly \$5 higher than RGGI’s ceiling price trigger for the CCR. The ceiling price for the California program ranges from \$47 to \$59/ton.

### 3. Maintain the region’s leadership position

- *RGGI states are positioned to reap the benefits of the clean energy economy*

Led by a courageous bipartisan group of state governors, the RGGI states were among the original 13 colonies that led this country's first revolution. Now they are leading the 21<sup>st</sup> century’s clean energy revolution. RGGI stands out as an important example to the rest of the country showing that significant GHG emission reductions are consistent with strong economic growth, while also improving the health of the population and protecting our regional ecosystems. Arguably, RGGI set the stage for the EPA’s Clean Power Plan and even played a role in the historic Paris Climate Agreement of December 2015.

Clearly the future belongs to renewable energy resources, many of which have become the lowest cost forms of electricity generation, and energy efficiency, which not only reduces demand, but also reduces electricity bills. According to the National Renewable Energy Laboratory (NREL), renewable energy resources, accessed with commercially available renewable generation technologies, could adequately supply 80% of total U.S. electricity generation in 2050 while balancing supply and demand at the hourly level.<sup>10</sup>



<sup>10</sup> NREL: Renewable Energy Futures Study, Volume 1 of 4: <http://www.nrel.gov/docs/fy12osti/52409-1.pdf>



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Many indicators, including the Department of Energy's consistent underestimation of renewable energy adoption and price declines, suggest that such a forecast could be met even sooner.

RGGI states can lead that transformation. As we've seen repeatedly in the past, when ambitious standards are set, innovative entrepreneurs respond, creating new products and whole new industries. If RGGI sets an ambitious target, the RGGI states will maintain their clean energy leadership, create thousands of new jobs, and keep the RGGI states on track to meet their individual climate goals.

Thank you for consideration of the E2 business perspective on these issues. Please contact Berl Hartman at 617 497-0393 or at [berl@berlhartman.com](mailto:berl@berlhartman.com) if you have any questions.

Sincerely,

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