



The low carbon technology company

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May 31, 2012

Mr. Peter Rennée
Business Manager
Regional Greenhouse Gas Initiative, Inc.
90 Church Street, 4th Floor, New York, NY 10007

Re: Regional Greenhouse Gas Initiative (RGGI) 2012
Program Review Comments prepared by ClimeCo
America Corporation

Dear Peter,

Thank you for the invitation to provide input into the RGGI program design options and elements. ClimeCo America Corporation is pleased to offer comments for consideration. I would welcome the opportunity to meet with you to further discuss our comments.

For questions or clarification to any items discussed within, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "William E. Flederbach, Jr.".

William E. Flederbach, Jr.
Executive Vice-President

Section 1 Offsets: ClimeCo Recommendations

1) Please provide your comments on including existing protocols from other registries or programs and potential changes to existing RGGI offset standards

1.1. What should the states consider when evaluating existing protocols and evaluating categories for which a standardized protocol has not been identified?

When identifying existing protocols it is critical that states consider performance standard protocols (standardized protocols) versus case-by-case additionality protocols (project specific protocols). Examples of standardized protocols would be those prepared under the Climate Action Reserve (CAR) or the American Carbon Registry (ACR). Examples of project specific protocols would be the Clean Development Mechanism (CDM) methodologies. Both the Verified Carbon Standard (VCS) and the American Carbon Registry (ACR) allows for the adoption of CDM methodologies.

Standardized protocols essentially streamline the additionality process by performing the additionality analysis for case specific industry or technologies for the entire geographic area, such as North America. This effort is time consuming, but results in a streamlined project development approach. It avoids the need to subjectively interpret individual project developer's assertions about additionality, and sends a clear signal to market participants about which projects will be eligible and which ones will not. However, both standardized and project specific protocols generally evaluate additionality using the following steps:

- Step 1: Regulatory Requirement Analysis: Identification of alternatives to the project activity consistent with mandatory laws and regulations. If there is a mandatory law or regulation requiring the abatement of greenhouse gases or the installation of technology which also destroys GHGs, the project fails additionality and will not be eligible for voluntary offsets. One exception to this rule is if the project reduces GHG emissions beyond what is required by the mandatory law or regulation. The surplus reductions beyond the requirements would be eligible for carbon offsets and would need to be specifically addressed during the carbon offset project application phase. Only if Step 1 is met would a project move to the following steps.
- Step 2: Investment Analysis: Would the project occur without carbon revenue? This can be case specific and may be based on the company's investment hurdle rate requirements. If the project creates financial returns which are sufficient (subjective and case specific) to warrant investment without the receipt of carbon offset revenue, the project would fail the investment analysis but can then move to a market barrier analysis.
- Step 3: Barrier Analysis: Are there technical or market barriers that would prevent the project from occurring without the added incentive of carbon credit revenue? Typically, if the investment analysis does not support carbon offsets, but a barrier exists which would

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result in the company NOT moving forward with the project, the barrier analysis would allow for the project to be viewed as additional, thus eligible for carbon offsets.

Step 4: Common Practice Analysis: If the project meets Step 1 and either Step 2 or Step 3 demonstrates additionality, then the last step to review is the common practice analysis. If the technology is not common practice in the industry, or business as usual, then the last additionality step is met and the project is eligible for carbon offsets. Common practice is defined as the baseline in the industry prior to the issuance of a voluntary offset protocol and its subsequent implementation. If common practice becomes the use of GHG mitigation technology solely based on the use of the protocol and receipt of carbon offsets, this does not redefine the common practice definition.

Although standardized protocols create tremendous value in that they decrease project eligibility uncertainty and streamline the process of creating high quality offsets, the process of creating such protocols is labor intensive and time consuming. For instance, CAR currently has fourteen (14) issued protocols, while ACR has nine (9) issued protocols. The CDM process has 185 protocols covering a very wide range of technologies. ClimeCo prefers standardized protocols such as those issued by CAR, but realizes the importance of VCS in that they allow for the application of the 185 CDM methodologies, which creates a much wider range of potential projects becoming eligible for carbon offsets.

1. Please provide your comments on including existing protocols from other registries or programs and potential changes to existing RGGI offset standards

1.2. Are there any existing standard protocols that you recommend the states to explore?

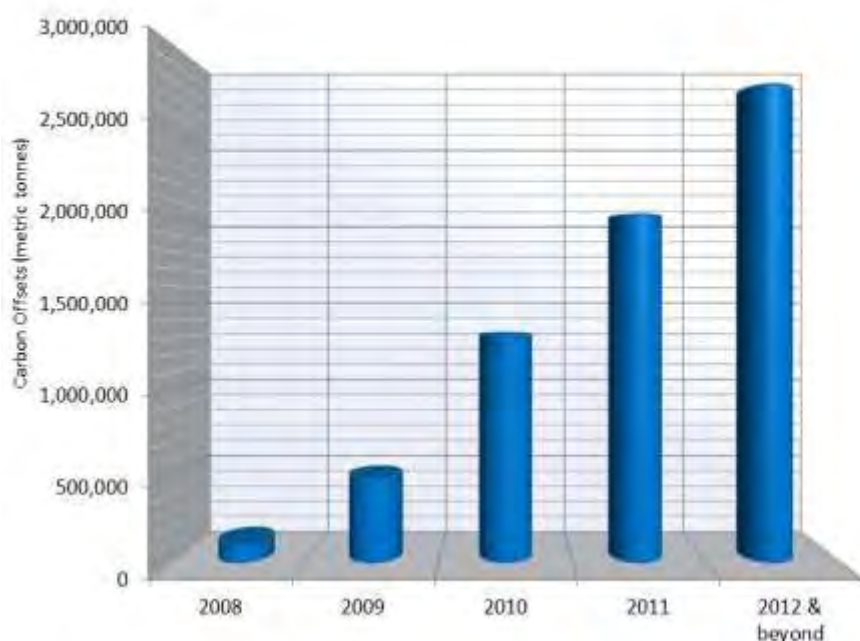
The Climate Action Reserve's climate offset leadership has led to the development of fourteen robust performance based offset protocols currently in use throughout North America. Of the four early action carbon offset protocols accepted by the California Air Resources Board (CARB), all of them were developed by CAR through their public stakeholder process. The largest volume of high quality offsets available from the remaining ten CAR protocols are generated from the Nitric Acid Protocol.

As the implementation of RGGI Phase II approaches, it is important that RGGI fully examine the benefits of high-quality carbon reduction projects, such as those from nitric acid projects in the United States. Nitric acid plants can be large GHG emitters through release of nitrous oxide (depending on the type of pollution abatement system historically implemented) in the production process. Fortunately, the development of the CAR Nitric Acid Production Project Protocol has allowed five projects to develop voluntarily that will generate over 2.7 million tonnes of carbon offsets every year under the CAR program.

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In addition, there are a number of other facilities planning additional projects using the CAR Nitric Acid Production protocol. The figure below demonstrates the current and projected GHG reduction capacity from the nitric acid sector from five existing CAR registered projects.

Figure 1: Carbon Offset Volumes from 5 existing N₂O abatement projects



USEPA in their recent release of the New Source Performance Standard (NSPS) Subpart Ga for nitric acid plants stated that: "These nitric acid production units also emit another nitrogen compound known as nitrous oxide (N₂O), which is considered a greenhouse gas (GHG). We are not proposing an N₂O emission standard in this action. Although we have limited data from facilities in the U.S, we believe that owners/operators of nitric acid production units should consider technologies and technology combinations that would be appropriate for controlling both NO_x and N₂O."

Through the endorsement of this project type, RGGI can create an incentive for the continued voluntary abatement of N₂O from this sector, thus creating a robust offset supply. ClimeCo estimates that the CAR Nitric Acid Protocol can generate 15-20 million offsets per year for use in RGGI, but only if a clear market signal is provided. These projects take over one year to implement and begin to generate offsets.

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High-Quality Offsets Which Are Verifiable and Enforceable

Offsets produced under CAR's Nitric Acid Protocol distinguish themselves through five aspects:

- a. The Protocol outlines a number of *permanent* emission reduction strategies that destroy N₂O emission through catalytic means, rather than being sequestered.
- b. The reductions are *real* and *quantifiable* through the use of electronic monitoring systems which accurately calculate the N₂O emission on a continual basis both before and after a projects implementation.
- c. The N₂O reductions are *verifiable* and *enforceable*, through annual verifications by accredited third-party firms and as the projects are subject to monitoring requirements more stringent than those required by current USEPA Requirements (under 40 CFR § 60).
- d. Tonnes generated from nitric acid projects are *additional* from a regulatory standpoint, as they exceed all existing state and national N₂O regulations and standards.
- e. Because there are no financial incentives to reduce N₂O without the sale of carbon offsets, the tonnes generated under the Protocol would not have been created under business-as-usual circumstances and are therefore considered to be *financially additional*.

2.0. Please provide your feedback on potential additional protocols that the states are exploring for further consideration including, potential benefits or barriers to adoption, suggestions for existing protocols, consideration for developing RGGI-specific protocols.

ClimeCo applauds RGGI's consideration of additional protocols, such as forestry, wetland restoration and ozone depleting substances. The additionality of these project types is solid as there are no existing regulations requiring GHG reductions from these market segments. ClimeCo would caution RGGI however on the expected volume of offsets generated from these additional protocols. RGGI will be in competition with the California market for ODS and forestry offsets. Currently, California Compliance Offsets (CCOs) are trading at approximately two thirds the price of California Compliance Allowances (CCAs). We would expect this price differential to continue, and as CCAs increase in price, CCOs will likely increase in price proportionally. A developer of forestry and ODS offsets will logically sell to the market with the greatest price signal.

As a result, ClimeCo would recommend that RGGI also evaluate CAR protocols that are not currently accepted by CARB, such as the CAR Nitric Acid Protocol. RGGI is in the position to create a market incentive through the support of this protocol, which will help to promote GHG reductions in the commercial fertilizer / agricultural space. It should be noted that approximately 70% of the US nitric acid production is currently used to produce nitrogen fertilizers, and four out of the five active N₂O abatement projects in the US are located at fertilizer production facilities.

3.0. What are the implications of changing the percentage limits for offsets that can be used to meet compliance?

ClimeCo strongly recommends the following changes to support carbon offset certainty, thus allowing the offset volume to be available when needed to mitigate compliance costs to the utilities:

- RGGI should consider increasing the allowable amount of offset usage. Using eight percent would be consistent with the California Air Resource Board (CARB) AB-32 program, where a capped entity can use offsets regardless of the allowance price.
- As RGGI looks to tighten the CO₂ cap and allowances, carbon offsets serve as the primary cost containment device in a cap-and-trade system. Using an 8% limit will greatly assist with cost containment and will create a more robust market to further promote offset investments. The 8% limit is consistent with the European Union and California systems.
- If RGGI maintains an allowance price threshold approach prior to allowing the use of additional offsets, ClimeCo recommends the following:
 - Increase the allowable percentage of offsets (from US projects) to a base of eight percent to make the offsets a meaningful compliance alternative.
 - Decrease allowance price threshold to \$7 per allowance for the use of international offsets.
 - Omit the requirement that allowance prices must remain above the price threshold for twelve consecutive months. Rather, once one quarterly auction allowance price exceeds the price threshold, allow offsets into the market for that compliance year.

4.0. 4.0 Implications of changing the requirement regarding accepting offset projects outside of the RGGI region? What should the states consider when evaluating potential changes to this requirement?

ClimeCo applauds RGGI's consideration of allowing offsets from outside of the region. As we all know, climate change is global, not regional. Whether an offset is generated in Texas or in New York should not make any relevant difference. The most important aspect of offsets is not the geographical location, rather the quality of the offset and volume potential to meet the utility demand and serve as cost containment to the cap-and-trade program.

5.0. Suggestions for streamlining or improving the efficiency of the existing administrative processes of the offset program?

Offsets will not play an important role in RGGI unless the CO₂ cap is tightened and surplus allocations retired. This combined with an increase in offset percentage will help drive offset demand. In addition, as previously stated, it is important for RGGI to omit the requirement that allowance prices must

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remain above the price threshold for twelve consecutive months. Rather, once one quarterly auction allowance price exceeds the price threshold, RGGI should consider allowing offsets into the market for that compliance year. Investments in carbon offset projects require market certainty and once an investment is made, the projects must be designed, constructed, operated and verified prior to generating quality offsets.

Currently, there is a surplus of allocations available on the auction at the RGGI floor price. This floor price is below the marginal cost of abatement for most GHG offset types, including the existing RGGI protocols. As a result, offsets played an insignificant role in the RGGI system. CAR Nitric Acid Offsets are created at a very competitive marginal cost of abatement based on the pure volume of offsets generated from each technology installation. However, even the current RGGI floor price is below that needed to allow for N₂O abatement investments. It is no surprise that the offset market within RGGI did not materialize.

Regarding streamlining the process, ClimeCo recommends using current offset protocols and registry infrastructure and sees no reason for RGGI to burden itself with developing unique protocols. Between CAR, ACR and VCS (pulling in CDM methodologies) there are plenty of quality offset protocols to select from.

In conclusion, ClimeCo strongly recommends RGGI support the agricultural offset supply chain, namely the CAR Nitric Acid Protocol. This clearly meets all CAR requirements and most importantly, USEPA is not regulating this sector. This is a great opportunity for RGGI to do what CARB has not accomplished yet, create an incentive to promote GHG abatement from the nitric acid sector, thus creating up to 15-20 million offsets per year, with greater than 2.5 million offsets per year already available.