

# THE NORTHEASTERN REGIONAL GREENHOUSE GAS INITIATIVE

# Comments on Offset Policy Recommendation of the SWG March 7, 2005

As we have commented previously, The Nature Conservancy fully supports the development of a model greenhouse gas (GHG) cap-and-trade program that will achieve significant reductions in CO<sub>2</sub> emissions from power generators in the Northeast.

We believe that allowing covered sources to meet a portion of their emission reduction targets using carbon offsets from well-designed projects, including land management and conservation projects, can ultimately help achieve a lower cap by increasing flexibility and lowering the overall compliance costs. In addition, such projects have the potential to generate substantial environmental and social co-benefits, such as improving water quality and protecting habitat needed to sustain wildlife in the Northeast region. For further background on why we feel the inclusion of land conservation and management project offsets are important to include in the RGGI program, see our previously submitted paper to the RGGI State Working Group (SWG), http://www.rggi.org/docs/land\_offsets\_final\_8\_04.pdf.

The Conservancy urges RGGI to structure the rules on the use of offsets to assure that significant emission reductions occur at the regulated power plants in the region. Offset projects should also be required to meet a high standard of environmental integrity.

We appreciate the opportunity to provide feedback and comments throughout this process and would welcome the opportunity to serve as part of any entity established for the purpose of creating the specific offset rules.

The following are comments to the State Working Group (SWG) in response their recent presentation to the RGGI Stakeholder Group on 2/16/05 regarding model rule development related to the use of offsets.

# **General Comments on Inclusion of Offsets in the Model Rule**

#### **Offset Types**

The Conservancy supports all of the offset types identified to date for inclusion in the model rule. We especially applaud the inclusion of afforestation as we know from experience that properly executed afforestation projects will yield carbon reduction and biodiversity benefits.

The Nature Conservancy also strongly supports the inclusion of forest conservation and improved forest management projects (e.g., wider stream-side buffers, longer rotations) in the RGGI offsets program. Several studies on forests in the Northeast suggest that there is

significant potential to reduce carbon emissions in the region through forest conservation and improved management. The Conservancy believes the up-front analysis to facilitate these projects is worthwhile, given the significant carbon and other benefits that would accompany forest conservation and improved forest management projects. We will soon launch a carbon feasibility project in the Northeast that will specifically measure the potential carbon and biodiversity benefits from land use activities and estimate the cost of these various activities. We plan on sharing the results of this project with the RGGI SWG. Attached is a fact sheet summarizing our proposed project.

The Conservancy also urges the consideration of and flexibility to include all offset project type. We urge the SWG to include language ensuring the program is open to considering all offset types moving forward. We also urge that language be included stipulating the process for considering additional offset types. Up to now, the SWG has described a process involving the identification of specific project types with the intention of including these project types along with some detail regarding their use in the model rule. We are concerned that by doing this, a precedent may be set for limiting the ability to include additional project activities as the process of establishing a regional cap and trade program proceeds. We feel that all offset options must be left on the table for consideration and potential inclusion in the RGGI regulation. Offset options must be left open to innovation and advances in technology. Such flexibility will yield the best results environmentally and economically.

#### Administration

Establishing a regional body with states retaining compliance authority for issuing credits seems to be the logical and cost effective method for establishing an offset program.

Adopting a state-by-state approach could lead to the development of inconsistent and even contradictory policies by each state. A state-by-state approach could also lead to inconsistent methodologies for carrying out, verifying and measuring projects and the ultimate credits produced. This could actually result in the uneven valuation of credits, which would undermine the offset program. A state-by-state approach is a recipe for disaster and could lead to the programs failure. If the system is too complex for participants to navigate, it will likely stifle innovation, raise costs to all involved, complicate processing and approval procedures and lessen overall involvement in the offset program. If the offset program is not robust, it could lead to the overall failure of the RGGI program and will limit the program's transferability to other regions of the country.

In establishing a regional body, the overall costs to each state would be less; consistent rules would be established and applied to reviewing applications for credits; and less time and money would be required on the part of applicants.

#### **Offset Credit Approval Process**

The process that the SWG has laid out in draft seems logical.

For afforestation projects, a single base year measurement, at the project site is required. Yet, as the program proceeds and other land conservation and management projects are considered, we feel strongly that consistent baselines need to be established prior to projects being carried out to provide a consistent starting point for project measurement and reduce project development and review costs.

We would advocate for an issuance of the credits from offset projects every five years or less. It should coincide with the monitoring program set up by the project proponent.

We would also support a statutory time limit for the review and approval of offset credit applications, e.g., 3-4 months.

# Geographic Eligibility

The Conservancy recommends allowing a portion of the offsets come from projects outside of the Northeast region and the U.S. to further reduce RGGI compliance costs and maximize global biodiversity conservation and poverty alleviation co-benefits. In addition, this would allow the RGGI program to link to other carbon markets. For example, while RGGI offsets could not be sold into the Kyoto Protocol international carbon market since the US has not ratified the Protocol, RGGI sources could purchase Clean Development Mechanism (CDM) credits if international offsets are allowed into the RGGI system. Any CDM credits purchased by a source in the RGGI region would be recorded by the CDM Executive Board registry and, therefore, could not be double counted or used by multiple buyers to meet their targets.

To encourage projects in the RGGI region, the RGGI could develop standardized baselines for the RGGI region to help reduce transaction costs and provide for more consistent project measurement. For projects that don't require regional baselines, such as afforestation projects, we would recommend that projects outside of the RGGI region be assigned a small discount value, such as 10%. This would provide incentive for afforestation projects in the RGGI region. We would also be willing to consider a limit on the overall use of offsets from outside of the RGGI region.

#### **Environmental Co-benefits**

Missing from the SWG recommendations is any mention of the requirement that projects produce environmental benefits and not harm the environment in any manner. This is a prerequisite that should be applied to all project types.

If such a requirement is not made, there is precedent for land conservation and management projects that provide a carbon benefit, yet inflict considerable environmental harm. An example of this type of activity involves the planting of non native species or monocultures that harm the local ecosystem and have a detrimental effect on biodiversity.

Yet, most land conservation and management projects provide tremendous environmental cobenefits, and these activities much be encouraged through offset programs. For land conservation and management projects in particular, we would recommend that RGGI require projects to promote and maintain native ecosystems, and provide some benefit to the environmental or local community (e.g., habitat protection, water quality improvement) in addition to the carbon benefits.

# **Additionality**

It would be helpful for the SWG to include language in the model rule to establish a basic definition of additionality. We recognize that further definitions should be developed and will vary for different offset types. Yet, we feel it would be useful to develop a starting point for all offset types. We would recommend that this definition be, "Offset projects must at a minimum exceed existing legal requirements. In addition, without carbon financing, the project activity implemented over the proposed project lifetime is not economically the most attractive course of action."

#### Permanence

In addition, we feel that a general definition of permanence should be included in the model rule to cover all project types. For each project type, more detailed definition should be considered. Our suggestion for a broad definition would be, "In order to ensure carbon credit permanence, contracts between project developers and credit purchasers need to be in place prior to project commencement, and these projects must specify which party is liable for credit replacement should unforeseen events occur that eliminate carbon credits previously accounted for during the project duration."

## Leakage

Also missing from the SWG presentation on offsets was any mention of leakage. To address potential activity shifting leakage, we recommend that RGGI require projects to two steps: 1) design the project to avoid negative leakage, if possible, and 2a) estimate potential leakage if not all can be mitigated and apply a leakage discount factor to the measured carbon benefits, or 2b) monitor for leakage over the project lifetime and subtract detected leakage from the amount of carbon benefits claimed.

For some projects, leakage may not be much of an issue. If this is the case, the project description could describe the reasons for the lack of leakage and recognize any procedures to implement to track potential leakage moving forward.

All information provided on leakage should be subject to review and certification by the third-party verifier.

#### **Specific Comments on Rules Re: Afforestation**

#### **Definition of Afforestation**

We agree with the definition presented by the SWG in their 2/16/05 presentation, "Conversion of land in non-forest land use to forest land use, through human intervention."

We are assuming that this definition would include the conversion of grasslands to forest land, and if not it should.

#### **Eligible Prerequisites**

We agree that the projects must at a minimum meet the legal requirements in the state in which they are carried out.

We also agree that to ensure additionality the land must have been clear of forests for ten years or more.

Finally, we agree that the project area, duration and actions to be taken must be defined prior to the project being carried out.

However, we are unsure what the SWG meant by project area. If SWG means the geographic location of the project, see our comments above. If the SWG means that the scale of the project be limited in any manner, we don't agree with this.

*Project Duration* - The Conservancy also recommends that RGGI not limit the lifetime of projects. Long-term projects (e.g., those lasting 50 years or more) offer greater permanence, biodiversity and other environmental benefits than short-term projects. By creating an upper limit on the project lifetime, RGGI would discourage long term projects and risk losing the associated biodiversity and other environmental benefits. In addition, there are some tree species that have an average stand age of greater than 50 years.

RGGI could limit the timeframe during which projects could earn credits against a specified baseline. For example, RGGI could allow project developers two different credit period options: the crediting period could be either a maximum of 30 years, with two renewals (i.e., up to 90 years) OR a maximum of 40 years, with no renewal. Project developers that want to maximize the potential amount of time over which they can generate credit and are willing to tolerate the risk of non-renewal, would likely select the first option, while project developers that want to maximize the certainty of receiving credit over a given period would likely select the second option. The CDM has chosen a similar approach to establishing crediting periods for reforestation projects.

#### **Baseline**

We agree that the base-year approach is the best method to use in accounting afforestation credits created for this program. We feel that the methodology for credit measurement be as straightforward and simple as possible. This approach meets those criteria and given the afforestation eligibility requirement for the land to have been without forest for the past ten years, it is unlikely that much natural growth would have occurred on the site.

#### **Project monitoring**

We agree that the project conduct periodic monitoring. We recommend that project monitoring occur, at a minimum, every five years. However, if the project manager would like to have credits issued more frequently, monitoring could be scheduled to occur in coordination with periodic credit awards.

#### Verification

We concur that some level of independent verification should be required. Whether these are independent verifiers or staff of the regional entity, we don't have a preference as long as the state feels they have the expertise, time and resources to conduct the review. If outside experts do the review, their qualifications and any potential conflicts of interest should be vetted prior to accepting them as a third party and a set protocol for review should be established to ensure

consistent review. RGGI can also draw from the CDM and the California Climate Action Registry, both of which have established rules to accredit forest carbon certifiers and protocols defining how land-based projects should be evaluated.

#### **Issuance of Offset Credits**

We agree that credits should be issued in accordance with the timing of the monitoring activities. See response to project monitoring above.

## **Accounting**

Various approaches were presented at the recent RGGI stakeholder meeting: ton/year, rental contract and temporary credit approaches.

The Conservancy does not recommend the ton year accounting approach given its complexity. No existing voluntary or mandatory offsets programs use this accounting approach.

Measurement uncertainty should be dealt with in measurement protocol to ensure measure and monitor to  $\pm 10\%$  of the mean with 95% confidence.

The Conservancy would recommend the rental approach. In other words, we recommend that, after periodic monitoring, a credit (or debit) is issued to the project in the amount equal to the additional carbon sequestered (or emitted) since project initiation or the most recent previous monitoring. At the end of the project duration, the project accrues a debit equal to the net credits that have been issued to the project. At the project initiator's option, this end-of-term debit might be nullified by securing a permanent conservation easement on the entire project area before the end of the project term. The benefit of this approach is that it allows the project developer to gain permanent or temporary credits depending on his/her desire or ability to obtain a permanent easement. As in the case in existing carbon markets, contracts between project developers and carbon offset buyers would establish who is liable for replacing carbon if unanticipated debits occur.

If there is a concern that the requirement to obtain permanent easements significantly stifles the opportunity for afforestation projects, we would entertain the option of granting temporary credits.

Thank you again for the opportunity to provide our feedback on this important issue. If you should have any comments or questions on this submittal, please contact:

Sarah Woodhouse Murdock Senior Policy Advisor, Global Climate Change Initiative The Nature Conservancy 11 Avenue DeLafayette Boston, MA 02111 617-542-1908 x204 smurdock@tnc.org

# **Attachment**

# Classification and Quantification of the Costs and Carbon Benefits of Improved Land Conservation and Management Activities in the Northeast

#### **Background**

The Nature Conservancy along with our partners Winrock International and The Sampson Group are carrying out a project to quantify and estimate the cost of carbon related to land-use activities in the Northeast. The purpose of this study is to identify opportunities for and quantify the carbon benefits of carrying out activities to improve land conservation and management of land in the Northeast.

Trees and plants take up carbon dioxide—the major greenhouse gas—and store the carbon in leaves, branches, trunks, stems, roots, and soil and "exhale" oxygen that humans breath. Protecting land and flora, or improving the way they are managed, can both reduce carbon dioxide emissions and increase carbon uptake. For example:

- Conservation projects that protect threatened forests can prevent the release of large amounts of carbon into the atmosphere that would have otherwise resulted from their destruction.
- > Timberland can be managed to maximize carbon benefits by, for example, increasing the age at which the trees are harvested and protecting or growing wider forested buffer zones around streams and rivers.
- ➤ Reforesting degraded lands can remove carbon from the atmosphere as the trees grow.

The Conservancy is uniquely positioned to play a role in influencing and informing the development of such projects. The Carbon Feasibility project is the first step toward identifying where the greatest opportunities exist for sequestering carbon, through what activities, and at what cost.

The Northeastern states (CT, DE, ME, MA, NH, NJ, NY, RI, VT are participating; MD and PA are observing) are leading the Country in establishing a cap and trade program for carbon dioxide (CO<sub>2</sub>). Such a program, if adopted, will require power plant reductions of CO<sub>2</sub> and establish a system for trading CO<sub>2</sub> credits as a means for achieving that reduction. Changes in land-use activities in the region could have significant benefits for the atmosphere. The Northeast trading system may offer carbon credits for storing carbon in soil and vegetation, and thus is likely to provide a financial incentive to implement land conservation and management activities that would reduce global warming emissions and provide other environmental benefits.

## **Project Summary**

The findings from this Conservancy project will provide a comprehensive look at the magnitudes, costs, and locations of opportunities to reduce emissions and sequester carbon through a variety of land-use activities in the Northeast region. The study area will include CT, DE, ME, MA, NH, NJ, NY, RI, VT, MD and PA. The products from the project will include

maps of where and how many carbon credits could be created from through improvements in land-use practices, and the corresponding costs of creating that carbon.

The results of the project will include:

- Historical trend of carbon sinks and sources in the land-use and forestry sector for the period of about 1987-1997;
- Classification of the land conservation and management activities that represent the major opportunities for carbon storage and emission reductions for each state by county within the Northeastern U.S.;
- Improved data on the quantity and costs of carbon storage for major classes of land-use and forest-based projects in the Northeast in a format that allows comparison with opportunities in other regions;
- Greater confidence within the Northeast region on how land-use and forestry projects that
  reduce emissions or sequester carbon can fit into State energy and natural resource planning
  goals; and
- Potential environmental co-benefits from carrying out the projects that reduce emissions or sequester carbon.

# **Project Process and Timing**

It is anticipated that this project will commence in February 2005 and take 17 months to complete (completion is expected by June 2006).

The U.S. Department of Energy is sponsoring and providing 80% base funding for this project. The remainder of the funding is being provided by several energy companies and through in kind contributions from our stakeholders and the project team's activities.

An important activity of the project will be to involve outside experts and stakeholders including state regulatory land-use and natural resources staff in the Northeast states, non governmental organizations (NGOs), and industry representatives throughout the project. We will seek their input and feedback as to our scope of work, the datasets to be used, assumptions regarding implementation of land-use changes, and the methodology for determining carbon creation potential and costs. Soon after the project commences, kick off meetings with stakeholders will be held to begin to seek to gain insights, information and data that will strengthen the results from this project. Through the involvement of key stakeholder, we also hope to ensure the use of the project findings in future policy making and carbon sequestration projects throughout the region.

#### **Project Results**

Understanding how much carbon can be stored or avoided for various classes of projects in the

Northeast will enable companies, the federal government, and state public agency staff to better understand how useful and cost effective a tool the implementation of a carbon offset program will be in the effort to reduce carbon emissions.

It is our hope that the results of this project will be a resource for policy makers, land-use managers and planners for future activities and actions. By providing a quantification of carbon sequestration potential matched with the potential cost of carbon created, we hope to facilitate actions and activities that will lead to an increased rate of carbon absorption from land-use activities.

We will also strive to identify where these activities will yield the greatest carbon, biodiversity and other environmental co-benefits and thus guide future Conservancy activities.

For additional information or questions regarding this project, please contact Sarah Woodhouse Murdock, The Nature Conservancy's Global Climate Change Initiative, <a href="mailto:smurdock@tnc.org">smurdock@tnc.org</a>, 617-542-1908 x204.