



March 18, 2009

Dear Members of Congress and Staff:

The above organizations believe that protection and sustainable management of forested ecosystems are critical components of climate policy, both globally and within the United States. This letter focuses on the opportunity provided by domestic forests to mitigate our contribution to climate change. Credits for emission reduction projects on private lands offer great potential, but it will be important to develop the details of offset policies and other policy mechanisms that ensure environmental integrity. At the end of this letter, we provide detailed recommendations for including domestic forest offsets in a cap-and-trade program. Many of our organizations have been involved in the development and implementation of forest climate policies and project accounting standards - both voluntary and regulatory - and we look forward to sharing our perspective regarding the importance of this issue.

Forested ecosystems, including soils, store more carbon than is currently present in the atmosphere. In many places, these important reserves of carbon are threatened by forestland conversion or degradation. Globally, about 20% of recent anthropogenic greenhouse gas emissions can be traced to deforestation, more emissions than the transportation sector. For these reasons, we believe that a comprehensive forest strategy of conservation, restoration and sustainable management must be part of the solution to reducing net greenhouse gas emissions, and therefore must be included in federal climate legislation through creating a forest offset category as well as funding additional forest conservation initiatives through allowance revenues.

Why U.S. Forests Are Important

U.S. forests are globally significant. With one-third of our land base currently forested, the U.S. has the fourth highest forested area among nations, after Russia, Brazil and Canada. Even though U.S. forests currently take in more carbon than they release each year, the future of this important carbon sink is in doubt. The USDA Forest Service estimates that over 1 million acres of forest were lost each year through the 1990's, and 50 million more acres are projected to be converted to other uses in the next 50 years.¹ Remaining forests are increasingly threatened by conversion, fragmentation, and climate-related stresses such as wildfire, drought, and pest and disease outbreaks. Thus, careful overall stewardship, as well as policies that prevent forestland conversion, must be critical elements of a comprehensive U.S. climate policy.

¹ USDA Forest Service 2007. *Interim Update of the 2000 Renewable Resources Planning Act Assessment.*

How Forests Moderate Climate Change

Forests can help moderate climate change in three main ways. First, maintaining intact forest ecosystems, especially late successional and old growth forests, prevents the release of vast amounts of carbon when forests are converted to other uses or degraded. Second, restoring fully functioning forests on formerly cleared land, or land that has been significantly degraded, can restore carbon stocks to their former levels and boost sequestration for many decades or even centuries into the future. Third, managing forests to a more natural state of older, more diverse species and forest structures, can increase carbon stores where past practices may have depleted them, and can also make forest ecosystems more resistant and resilient to climate change. Forested ecosystems have the capacity to store hundreds of tons of carbon on each acre in live and dead material, above and below ground, vegetation and soils. U.S. climate policy should aim to protect these forest carbon reservoirs where they exist, and to refill them where they have been depleted through judicious replanting and long-term stewardship.

➤ Forest Offsets That Meet High Quality Standards Should be Included in a Federal Cap and Trade Program

Under a cap and trade emissions reduction program, “offsets” are alternative compliance options that allow greenhouse gas emitters to meet their reduction targets in part through purchasing measurable emission reductions delivered by outside, permissible projects. Forest carbon holds tremendous promise as an offset tool, as forests can be managed to increase their carbon storage and “offset” emissions elsewhere. At their best, forest offsets in a federal cap and trade program would provide a cost-effective, market-based incentive to reward private landowners who protect, restore and enhance the forest carbon sinks under their care. Forest offsets would also provide valuable flexibility for emitters in meeting their reduction targets. However, forest offset rules must be carefully and conservatively designed to ensure that CO₂ emissions from regulated sources are actually offset by real, additional, verifiable, permanent, and enforceable emission reductions from the forest. Otherwise, the offset program may not achieve the intended emission reductions.

Forest offset standards that adhere to rigorous principles of environmental integrity have been established for regulatory compliance under the Regional Greenhouse Gas Initiative in the Northeast from eligible afforestation projects, and other forest project types are under development. Within the voluntary, pre-compliance market, the California Climate Action Registry and the internationally recognized Voluntary Carbon Standard have developed and approved guidance for reforestation, as well as for forest conservation and improved forest management. Many of the organizations endorsing this letter have been actively involved in the development and refinement of these standards, and believe these approaches can be models for forest offsets under a federal program.

We urge Congress to provide clear direction to regulatory agencies to rigorously address several critical details when designing a program that includes domestic forest carbon offsets as fully equivalent to other emissions reductions. Below we outline the critical elements that must be addressed by forest offset accounting rules. Further details on how these accounting requirements should be addressed are contained in the Appendix that follows this letter.

1) Additionality

Rules must ensure that offset projects induce more carbon sequestration or emissions reductions than otherwise would be expected to occur under the baseline (business as usual) scenario.

Multiple approaches to additionality have emerged, some more reliable than others in assuring that net reductions in atmospheric CO₂ from offsets are equivalent to those from fossil fuel reductions over the long run. Forests are dynamic and will sequester and release carbon as a result of both natural processes and anthropogenic influences. Also, the reasons to own and manage forests vary over time and across the U.S. To increase forest-based carbon storage, rules will need to frame a test for additionality that takes these factors into account. The principal way to account for these factors is to define and quantify a baseline as the change in expected carbon stocks in the absence of the proposed project. Expected carbon stocks should be defined as what would, or could, be reasonably expected as the result of natural processes; AND, what would, or could, be expected as the result of activities consistent with prevailing practices and market conditions (e.g. a business as usual scenario).

2) Permanence

Forest offsets must produce long-term climate benefits that are substantially equivalent to emissions reductions under the cap.

Permanence is one of the most important requirements for forest-based offsets. The degree to which offsets are permanent will determine whether they are fungible with emissions reductions in other sectors. The future loss of a carbon sink that was created as an offset, whatever the cause or reason, means that previous emissions were not offset. This can only be prevented by strong rules on permanence that include provisions for “reversals,” assign liabilities for enforcement and replacement, and identify appropriate contractual instruments, with a preference for long-term binding commitments such as permanent conservation easements. Getting the rules for permanence right, and ensuring these rules do not undermine additionality or introduce the opportunity for gaming is critical to the success of the entire program.

3) Accounting

All significant carbon pools affected by an offset project should be quantified (or omitted if that results in a conservative underestimate of project benefits), and requirements should be updated regularly as the science improves.

Once a carbon project baseline is established, a landowner or project developer must inventory the applicable carbon pools on a regular basis to determine the extent of carbon stocks changes relative to the baseline projection.

4) Leakage

Leakage caused by offset projects must be quantified and taken into account in the number of offset allowances issued by the program.

Leakage refers to the potential for a project to induce activities that result in increased emissions, thereby reducing the overall climate benefit of the project. Leakage is an important factor that must be addressed by project protocols and rules. The need to estimate leakage is greatly reduced if forest carbon policies move toward more comprehensive inclusion of land areas, including those land uses that result in significant greenhouse gas emissions.

5) Sustainability

Forest offset projects should demonstrate that, at a minimum, they maintain or exceed existing levels of environmental benefit and ecosystem function.

The enduring success of forest-based offset projects depends upon a healthy functioning forest ecosystem that continues to cycle carbon and deliver other important ecosystem services. For this reason, and to protect the broader public good, offset projects should, at a minimum, “do no harm” to the ecological health of enrolled lands.

6) Offset Limits

Limits should be set on the total quantity of offsets, with provisions to adjust the allowable quantity over time if necessary or advantageous.

Offsets are an important mechanism for encouraging action in uncapped sectors, such as the forest sector, and can be an important element of cost-control measures. Limited but sufficient use of offsets should be paired with stringent targets and timetables for the emissions cap.²

Please see the Appendix that follows this letter for more specific offset details on Numbers 1-6.

➤ **Additional Forest Policy Initiatives Are Needed Besides Offsets to Enhance Forest Carbon and Support Adaptation to Climate Change**

Nearly 60% of U.S. forests are privately owned, and these forests are most vulnerable to conversion or loss of carbon stocks. In addition, individuals and families own the majority of private forestland, with nearly half of that land held in parcels of less than 100 acres. Because many of these small private forests may not be able to access offset markets, the U.S. should consider policies and programs to protect forests from conversion and increase their role as a carbon sink. These initiatives could include a “no net loss” policy that helps secure existing forest carbon reserves, enhancements in existing assistance and incentive programs to store more carbon, and new programs explicitly designed for climate mitigation and adaptation.

A portion of the proceeds from auctioning allowances should be used to fund initiatives designed to reduce program costs, help the nation mitigate and adapt to climate impacts, and further drive down emissions. A portion of these proceeds should go to support adaptation and carbon sequestration activities on private forests, and in particular for those climate adaptation and

² There are a variety of views among the groups represented on this letter about how this approach would be implemented.

sequestration activities that do not fit the carbon offset model (e.g., engaging small landowners, and providing incentives for high conservation value forest projects). The Forest Legacy program, for instance, could protect more vulnerable forestland with perpetual conservation easements. Landowner incentive programs like the Wildlife Habitat Incentives Program, Conservation Reserve Program, Environmental Quality Improvement Program and Healthy Forests Reserve Program could also be adapted to fund carbon enhancement activities.

Conclusion

We respectfully urge Congress and the Administration to make protection and enhancement of U.S. forest carbon storage a high priority climate strategy, through 1) including forest offsets in a federal cap and trade program with rigorous standards; and 2) enhancing forest conservation and stewardship through allowance revenue.

We look forward to the chance to discuss these recommendations in greater detail. Please do not hesitate to contact us from the list in the Appendix to follow.

Sincerely,

Environment Northeast

Forest Guild

Manomet Center for Conservation Sciences

Pacific Forest Trust

Pinchot Institute for Conservation

Southern Environmental Law Center

The Nature Conservancy

The Wilderness Society

APPENDIX

1) Additionality

Rules must ensure that offset projects induce more carbon sequestration or emissions reductions than otherwise would be expected to occur under the baseline scenario:

- a) Additionality should be evaluated against a quantified baseline that reflects the expected sequestration and emissions reductions over time, in the absence of the proposed offset project activity. Projects should be credited for sequestration or emissions reductions exceeding the baseline amount.
- b) Standardized baseline methodologies that increase the consistency of project evaluation and streamline implementation are preferable, when suitable for the scale, location, and type of the proposed project.
- c) Baseline methodologies should be updated periodically to reflect changes in standard practices or technical data.
- d) Projects must demonstrate that they are reducing emissions or increasing sequestration beyond what they are already required to do by law.
- e) The development of quantitative baselines can use qualitative and quantitative information, including common practices, financial and economic data, and regional inventory data.
- f) Given the inherent challenge in projecting “business as usual” practices, offset project rules should be conservative in the credits awarded.

2) Permanence

Forest offsets must produce long-term climate benefits that are substantially equivalent to emissions reductions under the cap:

- a) For the purposes of an offset program, maintaining a forest carbon sequestration offset for 100 years can be considered equivalent to emission reductions from sources within the cap.³
- b) Rules should exert a preference for long-term binding commitments, especially permanent conservation easements, which more reliably protect forests and forest-based offsets.
- c) Rules for forest carbon offsets should require regular monitoring for the entire 100-year period, sufficient to detect any reversals (i.e. release of carbon previously sequestered). The failure to reliably monitor and report during the 100 years should be considered a reversal.
- d) Other approaches, such as short-term contracts, could be considered if they provide offsets equivalent to emissions reductions from sources within the cap.⁴

³ We recognize that from a scientific perspective, the issue is more complicated. Ideally carbon removed from the atmosphere by a project must remain sequestered for at least as long as the fossil emissions it balances are likely to remain in the atmosphere. Although 100 years is often accepted as an average residence time for CO₂, scientific literature demonstrates variation on this point. According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, “about 50% of a CO₂ increase will be removed from the atmosphere within 30 years, and a further 30% will be removed within a few centuries. The remaining 20% may stay in the atmosphere for many thousands of years.” Because some fossil-based CO₂ remains in the atmosphere essentially forever, regulations should not assume that carbon stored in forests or wood products for 100 years is fully equivalent to the same quantity of fossil fuel emissions reductions. Evolving scientific findings, particularly concerning the capacity of the ocean sink to continue absorbing carbon at historic rates, will require assumptions about longevity of greenhouse gases in the atmosphere to be updated frequently.

- e) An offset program should have provisions to replace carbon offsets lost to reversals, whether intentional (e.g. non-compliance and negligence) or un-intentional (e.g. fire and other natural disturbances).^{5,6}
- f) Rules should exert a preference for replacement using reserve pools or emissions allowances, since these approaches are likely to ensure full and immediate replacement of the original offset.
- g) An offset program should include provisions to update rules based on observed rates of reversal and cumulative failures in the integrity of offsets.

3) Accounting

All significant carbon pools affected by an offset project should be quantified (or omitted if that results in a conservative underestimate of project benefits), and requirements should be updated regularly as the science improves:

- a) Any accounting for wood products carbon must accurately reflect wood losses in processing and the emissions of associated waste streams (e.g. methane from decomposing wood), as well as land-use emissions associated with harvesting.
- b) Emissions from transport, processing, use, and disposal of wood products need to be carefully considered.
- c) Accredited third-party verification should be required in order to confirm that emissions reductions reported by the project have in fact been achieved and are being maintained.

4) Leakage

Leakage caused by offset projects must be quantified and taken into account in the amount of offset allowances issued by the program:

- a) To prevent project developers from negating their emissions reductions on one portion of an ownership with increased emissions elsewhere, reporting should be required for an entire ownership.
- b) The offset program should develop methodologies for estimating external (i.e. market) leakage for each project type. Standardized estimates of leakage, appropriate to geographic scale and affected market sectors, are preferred over estimates developed by projects.
- c) The number of offset allowances issued to each project must subtract the estimated leakage for that project.

⁴ There are a number of issues around the use of short-term contracts that must be resolved before they could be allowed in an offset program. Replacing credits at the end of a short-term contract period requires extensive administrative oversight and should be factored in to the costs associated with short-term contracts. Short-term contracts are also risky because they could be easier to game than long-term contracts. In forest management, for instance, a short-term commitment is often not long enough to detect actual changes in management beyond business as usual. Therefore, if short-term contracts are allowed, there should be clear and conservative rules regarding 1) the timing of project initiation and termination of the contract, 2) the relative discount associated with contracts of different duration, and 3) the replacement of credited emissions reductions that are not permanently protected (i.e. for 100 years).

⁵ Rules could treat unintentional reversals differently than intentional reversals. For instance, replacement for unintentional reversals could come from a reserve pool of credits, which projects contribute to on the basis of their risk rating. Replacement for intentional reversals, on the other hand, should come from eligible compliance units purchased for this purpose.

⁶ Some groups would take a different approach to permanence for reduced emissions from deforestation and degradation.

5) Sustainability

Forest offset projects should demonstrate that, at a minimum, they maintain or exceed existing levels of environmental benefit and ecosystem function:

Assurances of sustainability might be provided through recognized forest certification systems, but specific incentives and protections embedded in legislation and/or regulations would also be beneficial (e.g. for the use of native species).

6) Offset Limits

Limits should be set on the total quantity of offsets, with provisions to adjust the allowable quantity over time if necessary or advantageous:

Offset limits should be closely monitored to assess the performance of offsets and the effectiveness of emissions reductions, and clear direction should be provided to the relevant agencies to make any appropriate revisions to offset quality rules or limits.

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