

**Steve Ruddell**  
**Testimony on Reviewing Pending Climate Change Legislation**  
**Before the House Committee on Agriculture**  
**June 11, 2009**

Chairman Peterson, Ranking Member Lucas, members of the Committee thank you for the opportunity to appear before you today to discuss pending climate legislation and particularly the role of the nation's forests in this legislation.

I currently lead First Environment's environmental markets consulting and verification services, including bio-carbon, water, and biodiversity markets. First Environment is an American National Standards Institute (ANSI) accredited verification company that conducts greenhouse gas and offset project verifications for voluntary market programs like The Climate Registry, the Voluntary Carbon Standard, and the Chicago Climate Exchange.

I am a professional forester with 30 years of forest resource management, forest policy, forest economic and marketing research, and consulting experience. The past 10 have included consulting with clients and assessing opportunities on investments in forest conservation and sustainability initiatives using market-based mechanisms, including carbon asset management strategies for trading carbon offset projects, and sustainable forest management standards.

Within North and South America I have conducted forest carbon consulting and verification for integrated forest management companies, non-industrial forest forestland owners, tribal timberlands, NGO's, aggregators, conservation organizations, and institutional investors. My international experience includes Brazil, Peru, Uruguay, Indonesia, and the Central African Republic.

Since 2003 I have been involved with the development and/or review of several forest carbon offset project rules including the Chicago Climate Exchange, the Community, Climate, and Biodiversity Alliance, the California Forestry Protocols, and the Voluntary Carbon Standard. Currently I serve as vice-chair of the US/Canadian bi-national forest carbon standards committee to develop compliance quality forest offset standards under the ANSI and SCC national standards bodies. As a member of the Society of American Foresters, I recently served on its Climate Change Task Force that produced a publication on the roles of managed forests in climate mitigation. I understand that this publication has already been submitted to the members of this committee.

Forests play a significant role in mitigating the impacts of climate change, through active sequestration of atmospheric CO<sub>2</sub>. Forests are one of the largest natural carbon sinks for controlling our climate.

Today, according the US Environmental Protection Agency, forests and agriculture sequester and store roughly 12.5 percent of our annual emissions, serving as a net sink of carbon. What's more important is that EPA also estimates, with the proper incentives in

place, forests and agriculture in the U.S. alone sequester and store as much as 25% of our annual carbon emissions. This is important—the nation’s forests and agriculture lands can offer 25% of the solution to the challenge of climate change.

Regarding the role of forests in mitigating climate change, a primary goal in a US climate bill should be to **keep our forests as forests**. If we look long-term, as what the nation will need to help deal with changing climate, forests are a key element because of their carbon sequestration and storage potential. Because of this, US climate legislation must support policies and programs that provide incentives for private landowners to:

- 1) manage their lands for increasing carbon sequestration and storage,
- 2) avoid conversion to other land uses,
- 3) encourage sustainable forestry practices that have transformed public and private forestry in the US and,
- 4) support the complementary relationships between forest carbon offset markets and the provision of forest ecosystem services.

Climate legislation, and particularly a cap and trade system, which I’ll focus on given the current trend in the debate, can provide these incentives through two key opportunities. First, the legislation can allow for the creation and proliferation of carbon offset markets, where forest owners can sell their forest carbon sequestration and storage value to direct emitters to help offset their emissions. Secondly, the legislation can provide other incentives, such as payments for certain forestry practices that can reward these types of activities and also result in emissions reductions. The latter is typically talked about as emissions reductions outside the cap, meaning this would provide additional reductions in addition to those required by the cap.

I should note that First Environment is part of a national coalition called the Forest Climate Working Group, which represents a diverse set of interests including environmental organizations, forest owners, and offset project developers. This Working Group, developed under the leadership of the American Forest Foundation and The Trust for Public Lands, has come together around these main themes as well, and all agree about the tremendous role that forests play in mitigating climate change. Attached to my testimony is the platform of this coalition, including recommendations for climate legislation.

I’d like to spend most of my time today discussing the opportunities for forests to play a role in carbon offset markets. Recent EPA estimates of the Waxman-Markey Climate bill, HR 2454, point out that forests, mostly improved forest management activities, are likely to produce roughly 81 percent of offsets, equating to roughly 290 million tons of carbon annually. Please note that the EPA analysis does not indicate that the full 1 billion in domestic offsets allowed under the legislation will even be filled.

However, while forests have this tremendous potential, this can only be tapped if the rules for their participation in these markets are workable. Unfortunately, my read of the current legislation is that there is a tremendous lack of clarity in how the EPA might interpret the legislation, and there is no clear recognition that EPA will even develop the

opportunity for forests to play in offset markets. In my opinion, this must be improved, to give the needed market signals and reassurance that forests will be part of any emission reduction scheme and that the rules will be workable.

With this in mind, I offer the following suggestions for your consideration as you work to improve this legislation:

- **All private forests should be able to participate.** Any US legislation must provide these incentives equitably so that both small and large forests can participate in a future forest carbon offsets market.
- **Strong USDA role.** This Committee made it clear in the 2008 Farm Bill, that USDA would take a leading role in establishing carbon offset project emission reduction rules with the establishment of the Office of Ecosystem Services and Markets. A US climate bill must recognize the co-equal role of the USDA with the EPA for administering an emissions trading system. But more urgent is that the process of developing forest carbon standards begins moving forward today. This process will take at least 24 months, and markets are waiting now for clear signals.
- **Clear Recognition of forest project types.** The current legislation gives EPA tremendous discretion on the development of project types. To provide assurance to the market and to those who want to participate, and to ensure timely development and implementation of offset project rules, it's critical the legislation provide clear direction to EPA to develop offset project rules for forests projects including afforestation, reforestation, improved forest management with appropriate crediting for wood products, and avoided deforestation. With a strong USDA role in offset rule development, this issue would not be as big of a concern, given their expertise in forestry.
- **Recognize and reward early action.** Early action taken to develop and trade offset projects in the current voluntary markets must not be ignored. Forest landowners and forest carbon investors need to know that their efforts to mitigate climate change will be recognized, when their actions over the past few years were taken in a very risky financial environment and in the absence of clear federal guidance and leadership.
- **Environmental integrity standards must be workable for forest.** Again, if we focus on the primary goal of keeping forests as forests, providing an economic reason for landowners to keep their land in trees, we must ensure that market opportunities create this economic reason and ensure broad forest participation. Standards such as baselines, additionally, leakage, and permanence, must all be workable. Unfortunately, my read of the current legislation is that there is a complete lack of clarity as to whether these standards will work for landowners.

- **Third party verification will ensure program integrity.** Third party verification conducted by verifiers accredited by national standards setting bodies, such as ANSI, to internationally approved standards, (ISO 14065 standard), will provide Congress with assurances that offset project emission reductions traded within an emissions trading system have integrity.

In addition to carbon offset market opportunities for forests, climate legislation can also set up a system for providing incentive payments for forest owners to sequester and store carbon. This is typically discussed as emissions reductions that are achieved in addition to reduction required under the cap, and are thus required to meet “less stringent” tests of environmental integrity as compared with offsets. This can be done through tools that this Committee is very familiar with, such as conservation-style programs in the Farm Bill, that reward landowners, on a per-acre basis for undertaking activities. Previous legislation has set aside emissions allowances to pay for this type of program. Unfortunately, the current legislation sets aside 5 percent of allowances, roughly \$5 billion, for international forestry activities but does not provide any resources for projects here in the U.S. This should be corrected.

What’s really exciting is we have the technologies and expertise to undertake these activities today. Professional foresters know how to measure, monitor, and report carbon sequestration and storage. We know how to apply silvicultural practices to accomplish land management objectives that provide for forest products, biodiversity, clean water, AND carbon benefits. We know how to use growth and yield models to make better decisions for managing forest assets.

I’ve been involved in a number of forest offset projects and know that we can make these projects work both economically for landowner and environmentally to ensure the integrity of the emissions reductions.

Achieving this balance of environmental integrity and economic viability within forest offset project rules is critical. I would like to highlight some ways that projects can deal with these issues, in my experience. These are issues that make offset projects workable but are probably not details that need to be worked out in legislation.

1. **Contracts can deal with risks of reversals.** Forest offset projects are of course at risk of “reversal” when a disaster strikes like a wildfire or hurricane or if a landowner intentionally modifies their land use. Most contracts can deal with this issue, by establishing credit periods and monitoring periods within project contracts that allow landowners to participate while assigning the risk of reversals in ways that can ensure a permanent climate mitigation benefit.
2. **Forest offset project length and offset credit lengths do not need to be the same.** A forest owner may only be willing to commit to his or her carbon activities for a set period of time, say 20 years, however to ensure true emissions reductions, carbon reductions should be “permanent.” So how do we make this work, so forest owners can and want to participate in markets? Offset credits can

be required to meet a test of permanence, but can meet this test with multiple offset projects.

3. **Insuring the risk of reversals is essential.** Legislation must consider the need of promoting the development of third party institutions, such as aggregators, that will insure the risk of reversals and can help reduce the transaction costs of projects with economies of scale.
4. **Baselines must be workable for varying project types.** Baselines, meaning the starting point at which increasing or decreases in carbon are measured against, are critically important and can make or break opportunities for forests to participate. Achieving the primary goal of keeping forests as forests requires that methods for setting baselines need to be matched to the project type. Active forest management and afforestation project types should not necessarily require the same method for setting baselines. In the end, these baselines must be verifiable.
5. **Environmental co-benefits should be rewarded.** Most forest projects will produce environmental co-benefits like clean water and air and biodiversity. Carbon registries can make project documents available so that sellers can demonstrate to buyers the biodiversity and clean water co-benefits provided by a project. Currently, in voluntary markets, buyers are willing to pay more for forest projects that provide a rich set of co-benefits; this premium should be continued under a compliance market.

The climate legislation before you has the potential to ensure that forested ecosystems are maintained and enhanced in the U.S. If the right incentives are not put in place, forests may be left out of the system and we run the risk of losing the tremendous climate mitigation tool we now have. As the legislation is developed, I urge this Committee and Congress to continue to emphasize a primary goal of keeping forests as forests, and ensuring carbon markets and other incentives in the legislation work towards this primary goal, structuring rules to best provide revenue streams to forest owners to continue providing these climate mitigation benefits.

Again, thank you for the opportunity to come before you today. I'm happy to answer any questions you may have.