

U.S. forests today soak up an impressive 13 percent of our annual carbon emissions, and eastern forests are an important part of that equation. When our eastern forests leaf out in the spring, atmospheric scientists in Hawaii can measure the carbon decreasing in the atmosphere. Forests play a key role in the carbon cycle because trees use photosynthesis to convert atmospheric carbon dioxide to oxygen and to store carbon in their leaves, trunks, roots, branches, and surrounding soils. Forests also release carbon as they are harvested, burn, or otherwise decay. The U.S. Forest Service projects that forest carbon sequestration could almost double through additional forest conservation and improved management practices, such as longer harvest rotations that retain older trees in the forest. However, at current trends, U.S. forest carbon storage will *decrease* as development consumes forests at an increasing rate. We must protect and enhance our valuable forest carbon resources as part of the national climate strategy.



ENE has been working since 2003 to craft policy approaches to protect and enhance forest carbon storage (or “sequestration”) and to make forest carbon a climate priority in the United States. We have worked to include goals for the forest sector in state climate action plans, researched forest management practices that have the potential to sequester additional carbon, reframed regional development as a climate issue, and led efforts to include forest offset protocols in RGGI and forest conservation programs in federal climate legislation.

## **ENE advocates four major forest climate strategies:**

1. Modify forest management to retain more carbon (such as longer rotations) through forest offset and additional funding incentive programs;
2. Protect forests as forests through funding for permanent conservation easements to prevent forest conversion as development pressures increase;
3. Minimize forest loss during development through mitigation including cluster zoning and forest replacement requirements; and
4. Utilize forest residue and sustainably harvested wood for heating fuel in place of high carbon oil as appropriate, ensuring that harvesting is sustainable and that water quality, biodiversity, recreation, forest resilience and other important forest values are not compromised.

## **ENE's current project priorities to advance these strategies:**

### **1. Rigorous Forest Offsets**

Offsets are opportunities for industries regulated under “cap and trade” emissions reduction programs to meet required emissions reductions in part through approved alternatives, such as conserving forestlands. Offsets provide flexibility and cost-effective choices for reducing emissions. And forest offsets offer landowners a welcome new revenue stream and an opportunity to join the low carbon economy by managing their forests for increased carbon storage. However, offset standards must be rigorous in order to ensure that they represent real emissions reductions. ENE took a lead role in an

effort to create detailed recommendations to allow three new forest offset categories in the 10-state Regional Greenhouse Gas Initiative (RGGI). We submitted the results of the extensive 2-year stakeholder advised process to RGGI in July of 2009, and will work with RGGI and colleagues in the coming year to encourage adoption of the new forest offset categories. ENE's federal climate advocacy in D.C. also includes a strong forest component. ENE has worked closely with conservation and forestry colleagues and congressional leaders to advocate rigorous forest offsets standards in the House climate legislation, and we will continue to push for more stringent rules in the Senate.

## **2. Supplemental Forest Carbon Funding**

Millions of small landowners who could protect their forestlands through permanent easement or carbon-enhancing management would not be able to join an offset program due to cost, scale, or program rigor. ENE has advocated for significant funding in federal climate legislation to fund carefully structured, 20-year carbon contracts and also permanent conservation easements to help protect more forestland in perpetuity from escalating development pressures. This program would allow millions of landowners across the country to receive welcome new revenues; permanently protect forestland and co-benefits including biodiversity, watershed protection and recreation; and help combat global warming.

## **3. Minimizing Forest Loss From Development**

The GHG emissions from forest loss due to development are poorly documented but considerable; ENE estimates that in Maine alone the GHG totals are equivalent to the annual emissions from 200,000 cars. ENE has advocated in specific development proceedings the need to measure and mitigate this forest carbon loss as part of the development project process. ENE is currently working with colleagues in Maine to pass legislation that would require minimizing forest loss (studies show that forest loss can be reduced 41% through cluster zoning and other means), and mitigating the forest loss that does occur. Global warming legislation passed in MA and CT offer additional opportunities to advocate for forest carbon mitigation in the development process.

## **4. Sustainably Harvested Wood Energy**

State and federal laws require an increasing percentage of renewable energy for electricity generation and liquid fuels. Sustainably harvested wood can make an important contribution to replacing carbon-intensive alternatives, but "sustainability" definitions vary, and pressure to meet renewable energy requirements could threaten other important forest values including biodiversity, wildlife, recreation, water quality, and forest resilience if sustainability rules are not carefully crafted and implemented. ENE is working to ensure that biomass and biofuels definitions in state, regional, and federal climate and energy bills promote renewable wood energy but only within a sound sustainability framework.

## **5. Comprehensive Forest Carbon Monitoring**

Increased funding should be provided for forest carbon measuring and monitoring in order to develop meaningful state baselines for forest carbon stocks and to help states maintain and exceed that baseline for the long-term. This program funding is essential in order for the states and the U.S. as a whole to develop the knowledge base, framework, and tools to protect and enhance our forest carbon resources over time. ENE has advocated for monitoring funding as part of the federal climate bill and will continue to work with conservation and agency colleagues to advance this key component of the U.S. forest carbon strategy.



8 Summer Street, PO Box 583 Rockport, ME 04856 (207) 236-6470 [admin@env-ne.org](mailto:admin@env-ne.org)  
Rockport, ME / Boston, MA / Providence, RI / Hartford, CT / Portland, ME  
Charlottetown, PEI, Canada / [www.env-ne.org](http://www.env-ne.org) / Daniel L. Sosland, Executive Director

Environment Northeast is a nonprofit organization that researches and advocates innovative policies that tackle our environmental challenges while promoting sustainable economic development. ENE is at the forefront of state and regional efforts to combat global warming with solutions that promote clean energy, clean air and healthy forests.