

FEDERAL CLIMATE CHANGE POLICY: A PROGRAMMATIC APPROACH TO “NO NET LOSS” IN DOMESTIC FORESTS

Forests have a major impact on overall levels of atmospheric carbon dioxide (CO₂), both emitting and sequestering significant quantities of CO₂ over time. The forest sector is unique because it can reabsorb its own – and other sectors’ – CO₂ emissions from the atmosphere. Forests occupy one-third of the US landmass and have the potential to contribute at least 50 billion of tons of net emissions reductions over the next 50 years through restoration, conservation and improved management. Forests also have significant impact on other major emissions sectors, particularly with their increasing role in producing alternative, renewable energy and potentially transportation fuel, as well as its material impact on methane emissions from landfills. Therefore, it is important to address the forest sector programmatically, integrating its multiple lifecycle impacts into climate change policy. *Forests should be integrated into a greenhouse gas (GHG) reduction program alongside other sectors as part of an overarching greenhouse gas accounting system. This is critical to ensuring that net, durable climate gains are indeed made by America’s forests as a result of policies and actions directed at reducing overall GHG emissions.*

Roughly one-third of US forests are in public, primarily federal, ownership and two-thirds are in private ownership. The primary climate policy goal for both ownership types should be to, at a minimum, maintain current climate benefits and, where possible, increase both the amount and durability thereof. A common, but differentiated, accounting system for both kinds of ownership types is necessary given the differences in ownership objectives, management, risk and the varying information available in each. Integrating the private forest sector into a “cap and trade” system will help meet national greenhouse GHG reduction goals by broadening the base of actions across a greater portion of the economy and facilitating earlier emission reductions in several sectors. It will also help prevent potential leakage within and across related sectors noted above, e.g. energy, landfill and transportation.

The restoration and stewardship of federal lands is key to providing durable climate gains for the US as federal lands provide the bulk of current forest-based sequestration and emissions reductions. Properly managed, they could yield additional climate benefits, increasing their total carbon sequestered and its sustainability. Maintaining, indeed increasing, carbon stocks and their ecosystem resiliency on federal lands must be a key goal in overall climate policy. However, federal lands should not be included in a “cap and trade” or other carbon market system given concerns about additionality, ownership and potential conflicts of interest. Federal lands management should be addressed through other administrative and legislative policy mechanisms while using direct market forces on the private sector where they are effective incentives.

Private forests should be included within any comprehensive GHG emissions reductions program via cap and trade or other market-based systems, as private ownership is responsive to market forces and private forests have been a declining “sink” due to deforestation and depletion. Three key elements frame this strategic approach:

- 1. Maintaining the current level of forest climate benefits via a “no net loss” and mitigation policy*
- 2. Monitoring and tracking of overall forest carbon – both from within forests and through transfer into other sectors as wood products including woody biomass energy and waste into landfills*
- 3. Marketing net gains from forest-based emissions reductions projects and providing incentives to achieve these reductions*



1. No Net Loss: Mitigate for GHG emissions from forest conversion and lost sequestration

The conversion of forests to other land uses results in significant emissions of biological carbon stocks and loss of future sequestration potential. These emissions and lost sequestration should be mitigated, as they will be for significant GHG emissions in other sectors. Mitigation fees on emissions from conversion would be used to establish a fund to finance restoration of carbon stocks in the forest sector. *This can be implemented via NEPA, the Clean Air Act and state policy equivalents as part of assessing impacts of CO₂ pollution. Further forest conversion emissions can be minimized or avoided through changes in local, regional and state land use planning.*

2. Maintain and track private forest carbon banks

Forest sequestration contributes significantly to the carbon budget in the United States, but data must be standardized and improved to effectively measure and monitor changes in carbon stocks. Landowners who manage regularly for timber have good data on timber, and therefore carbon, stocks, while those who manage less generally have less data. Improving these data should be tiered on a “need to know” basis of material changes to these stocks. Forest landowners who do not manage their forests for timber, or otherwise alter their carbon stocks significantly such as by converting to non-forest use, would not be required to report. Landowners who manage regularly and maintain their lands in current-use for timber could report changes in forest carbon stocks at the time of harvest to the appropriate state entity.

The accuracy and specificity of this reporting can be improved to a standardized-level based on guidance from the US Forest Service. Cost-share grants to states, as well as access to federal funding for climate related energy or transportation efforts, could reduce the cost burden associated with implementing effective monitoring, especially in states where timber inventory of private forests is not required. To reduce potential cost burden, cost-share programs could also be created for small family forest landowners. If monitoring indicates that carbon stocks are declining on managed forestlands, decision-makers will be in a more informed position to take appropriate policy actions.

Forest products represent a material carbon store. A standardized, transparent and rigorous accounting approach needs to be instituted to track the carbon from the forest sector as wood products and biomass into the related sectors of energy, construction, fuels, etc. Accounting needs to link the forest sector with the energy, manufacturing, and construction sectors to avoid “leakage,” double counting and to ensure the full lifecycle benefits of forest carbon are assessed including via substitution for more energy intensive materials. *This approach should be included in any “cap and trade” and/or alternative, renewable energy legislation and can also be incorporated in existing federal programs such as those funded under the Transportation and Farm Bills.*

3. Market and policy incentives for net gains in forest carbon

To encourage net emissions reductions from the forest sector, private landowners would receive emissions reduction “credit” for projects that durably increase net carbon stocks above legal requirements. These credits could be then traded to entities within sector and across other emitting sectors to meet emission reduction targets. With the overall sector accounting as outlined above, these emissions reductions projects would provide real, net gains without “leakage” from declines elsewhere in the forest sector or other sectors (as with biomass energy). Federal funding would also be allocated for the acquisition of conservation easements to encourage the long-term security and integrity of these carbon projects from permanent conservation of well-managed forests. *This approach should be a key component of both “cap and trade” and other climate-related legislation and also incorporated in existing federally funded conservation programs. Funding for “adaptation” could also be targeted to promote permanent conservation of forests and forest restoration and stewardship.*