



Overview of Forest Carbon Policies Prepared for Vermont Legislature Study Committee

Thank you for the opportunity to provide information and perspective to the Study Committee on potential models for catalyzing forest carbon mitigation in Vermont. American Forests is working with Vermont and other states of the U.S. Climate Alliance to advance policy solutions for forests and climate change, providing us with a wide view of this activity. We stand ready to enhance this document with other policy models as our research and engagement with states continues.

We see a number of key trends in this information. The first is the inherent limitation of offset markets. The relatively narrow range of forest project types and landowners represented in California's compliance offset program is one example, and the failure to develop a viable forest offset market under RGGI is another. Yet, offsets have been used successfully in a diversity of contexts, including stacked credits that bundle carbon with other ecosystem services, and remain an essential tool.

While offsets offer a compelling way to generate new revenue for forest carbon projects, it is encouraging to see states also using familiar cost-share and grant models to assure that they can fund a wider range of activities across more diverse lands. California has led the way in this approach, but other states like New Jersey have also pursued land sector carbon goals through traditional funding models.

Lastly, American Forests and our partners in the Forest-Climate Working Group believe that policymakers should favor "all of the above" approaches to maximize potential for success. For example, offsets and incentives complement each other, including the way incentive programs can help develop landowner capacity to eventually engage in more complex offset markets. Similarly, funding for climate activities can come from many sources, ranging from carbon dollars (e.g. RGGI proceeds) and mitigation measures to bond measures to annual appropriations. A diversity of these funding streams is represented below. Our [FCWG State Policy Toolkit](#) outlines this approach, and provides some supplemental information to the state examples outlined below. Ultimately, we believe in matching the diversity of policy mechanisms to cover the range of actors and activities that a state seeks to mobilize.

California

This study committee is likely widely familiar with the [California ARB compliance offsets market](#), which has issued 130 million credits to forest offset projects. Less familiar might be the ways that California has put its proceeds from carbon allowance auctions into paying directly for forestry actions that achieve specified carbon mitigation outcomes through the [California Climate Investments](#). These outcomes must be rigorously calculated in advance using specified carbon quantification methodologies.

CAL Fire has a number of potentially relevant examples for Vermont's purposes, including its [Forest Health Grants](#), which are focused on a range of practices that enhance sequestration and maintain resilient carbon storage. The [Fire Prevention Grants](#) specify certain forest practices that have potential to reduce wildfire emissions, increase sequestration through growth, and provide a co-benefit through

community protection. Both programs are illustrative of how any set of forest practices can be identified, quantified by project proponents, and incentivized. Similarly, the [Forest Improvement Program](#) delivers cost-share for private forest owners, and includes a carbon quantification requirement and associated methodology for applications funded through CCI.

Finally, CCI funds have flowed into conservation easement projects through the state's Forest Legacy Program, and funding has also been delivered through the Urban and Community Forestry Program, potentially a useful example as pertains to Vermont's town forests.

Oregon

Oregon was a pioneer in establishing a financial mitigation option for new power plants under its groundbreaking 1997 climate law. This program invites plants to feed funding into a trust for purchase of offsets with those mitigation payments. The Climate Trust has historically been the private sector entity placing these funds. As [described in this webpage](#), the program has had an uneven impact due to its structure and the resulting variability of funding, but nevertheless presents an interesting model.

Oregon also has established an [Oregon Resources Trust](#) to provide cost-share funding to landowners tied to carbon. ([Link to current statute is here.](#)) This is a cost-share program run by the Department of Forestry that funds projects that advance carbon sequestration, among other outcomes.

Finally, although Oregon does not yet have its own market-based emissions reduction program, pending potential revival of cap-and-trade legislation, the state has authorized development of forest carbon offsets ([Ore. Rev. Stat. §526.780 et seq.](#)). Under this provision, Oregon permits the state forester to develop contracts with non-federal forest landowners to market, register, transfer or sell forest carbon offsets as a stewardship incentive. The sale of offsets must be at or greater than fair market value for non-federal forest owners. A portion of proceeds is directed to technical, financial and management assistance for non-federal forest landowners and to program administration. Activities eligible for offset credits include afforestation, reforestation and specific forest management practices.

Washington State

Washington State has been particularly active in this area. In its [latest state budget](#), the Legislature provided funds and direction for the Department of Natural Resources to establish a forest carbon working group, improve forest carbon inventories, and investigate ways to facilitate landowner participation in offset programs. A report on these activities will be due by December 1, 2020.

“(a) \$250,000 of the general fund—state appropriation for fiscal year 2020 and \$125,000 of the general fund—state appropriation for fiscal year 2021 are provided solely for the following activities: (i) Conducting carbon inventories to build on existing efforts to understand carbon stocks, flux, trends, emissions, and sequestration across Washington's natural and working lands, including harvested wood products, wildfire emissions, land management activities, and sawmill energy use and emissions. Where feasible, the department shall use available existing data and information to conduct this inventory and analysis. For the purposes of this section, natural and working land types include forests, croplands,

rangelands, wetlands, grasslands, aquatic lands, and urban green space. (ii) Compiling and providing access to information on existing 5 opportunities for carbon compensation services and other incentive-based carbon reducing programs to assist owners of private and other nonstate owned or managed forestland interested in voluntarily engaging in carbon markets. (b) By December 1, 2020, the department must submit a report to the appropriate committees of the legislature summarizing the results of the inventories required under this section, and assessing actions that may improve the efficiency and effectiveness of carbon inventory activities on natural and working lands, including carbon sequestration in harvested forest products. The department must also describe any barriers, including costs, to the use of voluntary, incentive-based carbon reducing or sequestering programs. The department may also include recommendations for additional work or legislation that may be advisable resulting from the advisory group created in this subsection as part of this report. (c) The department must form a natural and working lands carbon sequestration advisory group to help guide the activities provided in this section. The advisory group must be composed of a balance of representatives reflecting the diverse interests and expertise involved on the subject of carbon sequestration on natural and working lands.”

In earlier action, the state has been exploring use of existing authorities as a way to advance its forest carbon goals. The Washington Wildlife and Recreation Program is a multi-faceted grants program that funds conservation restoration projects across the state. When the program was expanded in 2016 to include [Forestland Preservation](#) (permanent conservation projects on working forestland), the Legislature included carbon as an eligible grant criterion. This was done to help test the State’s ability to draw in applicants and effectively evaluate the mitigation potential in each, envisioning that eventual revenue from a carbon tax would feed such work at a larger scale. The results have been mixed, [by Washington State’s own assessment](#), largely due the small pool of funding available and limited response from applicants to-date on the carbon criterion.

It is worth noting that Washington State has shown strong signs that if a carbon tax were to pass, it would direct as much as a third of revenues into land sector mitigation and adaptation projects. This has been seen in the text of recent carbon tax proposals and citizen initiatives.

New Jersey

New Jersey has chosen to allocate 10 percent of its RGGI proceeds into forest and wetland projects that can help to mitigate climate change promote resilience. This [presentation from the State of NJ](#) provides an excellent overview of the legislative history and mechanics. This funding allocation was included in the original legislation that authorized New Jersey’s entry into RGGI, and after discussion of potentially increasing or eliminating this provision, it was maintained intact for the state’s re-entry. The state is currently working on new guidelines for allocation of these funds, with a goal to provide tighter criteria and quantification guidance for project development and selection. Current priorities appear to be focused on restoration of Atlantic white cedar on state lands, a carbon-rich forest type largely lost due to past management, and more active fire management in the state’s Pinelands Reserve to address wildfire emissions. To help supplement RGGI proceeds and other state funding, the Legislature just approved \$19 million to aid the white cedar effort.

Connecticut

Although not as explicitly detailed as the New Jersey program under RGGI, the State of Connecticut has latitude within its authorizing statute to allocate a portion of RGGI funds to land sector projects. Based on personal communications with CT DEP officials at last summer's Climate Alliance Learning Lab, we understand that this has been used sporadically to fund selected projects, primarily in urban forestry.

New York

Surely familiar to the study group, the new climate legislation in New York State includes provisions to establish an offsets opportunity, inclusive of forests, for up to 15% of compliance by covered entities. The State has three years to promulgate regulations. From personal communications with forest landowners in New York and market leading carbon developers that have been active on the California and voluntary markets, there are many questions about how this is going play out.

"Greenhouse gas emission offset projects" means one or more projects, including:

- a. Natural carbon sinks including but not limited to afforestation, reforestation, or wetlands restoration;*
- b. Greening infrastructure;*
- c. Restoration and sustainable management of natural and urban forests or working lands, grasslands, coastal wetlands and sub-tidal habitats;*
- d. Efforts to reduce hydrofluorocarbon refrigerant, sulfur hexafluoride, and other ozone depleting substance releases;*
- e. Anaerobic digesters, where energy produced is directed toward localized use;*
- f. Carbon capture and sequestration;*
- g. Ecosystem restoration; and*
- h. Other types of projects recommended by the council in consultation with the climate justice working group that provide public health and environmental benefits, and do not create burdens in disadvantaged communities.*

The state's new Climate Action Council is also charged with identifying other measures to advance forest carbon mitigation. This could include regulatory action, funding programs, or both.

"d. Measures to achieve long-term carbon sequestration and/or promote best management practices in land use, agriculture and forestry."

Virginia

In the spring of 2019, the State of Virginia [enacted legislation](#) to facilitate aggregation of landowners for carbon offset project development. This creative effort, working with Acre Investment as a key partner, is working to develop a "[carbon+](#)" crediting model that can combine multiple environmental outcomes including carbon and compliance with the State's obligations for Chesapeake Bay water quality. Fauquier County, Virginia is being used as a pilot jurisdiction in coordination from state agencies, county government, and Acre Investment.

CHAPTER 546

An Act to amend and reenact §15.2-4901 of the Code of Virginia, relating to industrial development authorities; legislative intent.

[H 2485]

Approved March 18, 2019

Be it enacted by the General Assembly of Virginia:

1. That §15.2-4901 of the Code of Virginia is amended and reenacted as follows:

§15.2-4901. Purpose of chapter.

It is the further intent of the legislature and shall be the policy of the Commonwealth to grant to industrial development authorities the powers contained herein with respect to facilitating and supporting landowner access to carbon markets through aggregation of landowners to reach a size that attracts the investment of private capital. Such aggregation provides landowners of various size tracts of land enhanced opportunities to access capital and benefits that support and enhance the agriculture and forest industries for the health, welfare, convenience and prosperity of the inhabitants of the Commonwealth.

For more information, please contact:

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