



THE JOHN MUIR PROJECT
OF EARTH ISLAND INSTITUTE

November 21st, 2019

Representative Kathy Castor, Chair
House Select Committee on the Climate Crisis
2052 Rayburn House Office Building
Washington, DC 20515

Dear Chair Castor and Members of the Committee;

The below signed organizations and the members we represent from across the United States are pleased to provide this input to the House Select Committee on the Climate Crisis as it provides leadership in shaping a robust climate agenda for the nation. Our signatories represent scientific, conservation and community organizations concerned with the protection of our forests and climate smart alternatives to forest practices which drive climate change and undermine climate resiliency.

We appreciate the Committee's commitment to addressing the climate crisis and its interest in leading the charge to create, update and invigorate laws governing the way we use and interact with our environment. Forests are critical and will continue to be critical in any action taken to mitigate and adapt to climate change. We have prepared this brief memorandum to flag what we believe are high priorities for the next President and Congress. The memorandum also addresses what we believe needs to change at the state level.

In three parts, this memorandum identifies the key climate threats posed by continued mismanagement of US forests, policies responsive to those threats, and steps needed to implement the policies. The implementation discussion further divides policy recommendations into those that are new, those that can be based on existing models or proposals, and those that could be implemented with no new authority. Links to key resources are included and we stand ready to supply scientific and technical reports and data to help you explore the issues and policy options in more detail.

Key climate threats associated with mismanagement of US forests

- 1) Deforestation and carbon sequestration dead zones. Since 2000, [over 94 million acres of tree cover has been stripped across the US](#) for wood and paper products or to clear the way for agriculture, urban development and infrastructure. This process has removed the equivalent of over 10.6 gigatons of CO₂ from the land. In addition to carbon lost to the atmosphere via the wood products production process, clearcuts [emit more carbon than they sequester](#) for up to fifteen years after logging, so these recently stripped forestlands are now CO₂ sources rather than sinks.

- 2) Logging and wood products emissions. The logging and wood products sector is very carbon intensive. Wood is half carbon by weight, and when trees are cut, they begin to emit carbon dioxide back into the atmosphere. Short term products, like woody biomass, pulp, and paper, emit most of their carbon in a matter of hours to a few years, while longer term products, like structural lumber, lose most of their carbon in about fifty years. Either way, wood products are mostly sources and not sinks for carbon. In addition, significant direct and indirect emissions are generated by logging, application of chemicals and fertilizers, construction of logging roads, and the burning and decay of logging slash. In Oregon, [two independent scientific and technical assessments](#) found the logging and wood products sector to be the leading source of GHG emissions. In North Carolina, this sector is likely the [third most carbon intensive](#).
- 3) Overconsumption of wood and paper products. Solving the climate crisis requires reducing consumption of fossil fuels, conventional wood and paper products and other carbon-intensive goods and services. This consumption is driven, in large part, because the market prices of these goods and services do not reflect climate damages. As a result, in the US, wood and paper products are consumed in wasteful quantities. From oversized houses on our cities' suburban fringes to the mountains of fast food paper and packaging waste generated each day, there is clearly major room for improvement. Wood and paper waste make up [33% of US landfill waste](#). The timber industry's push for tall wooden buildings, wood for energy, and greater consumption of wood products as a "climate solution" is untethered to the reality that conventional wood products are actually more carbon intensive than many non-wood substitutes when the full carbon impact of logging is included. One [recent analysis](#) that included emissions associated with soil carbon loss and conversion of native forests into tree plantations found wood-based buildings to have a cradle to grave carbon footprint six percent higher than concrete buildings. Moreover, this analysis did not even take into account the extent to which logging of all types substantially reduces forest carbon sequestration and storage capacity, [due to soil compaction and nutrient removal](#).
- 4) Wall Street, foreign, and large corporate ownership. Ownership of US forestlands by large and [increasingly foreign investor-driven corporations](#), such as Timber Investment Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs), hinders adoption of climate-smart practices because these entities prioritize near-term shareholder interests over building carbon stocks and restoring ecosystems. Their corporate DNA is fundamentally incompatible with the kinds of management practices—such as long rotations, alternatives to clearcutting and protected areas—that must occur if U.S forests are to make a meaningful, efficient contribution to solving the climate crisis. They also represent absentee landlords with corporate offices far removed from the communities in which they operate and thus have no stake in safeguarding water supplies or other community resources at risk from climate change.
- 5) Climate vulnerability. Many scientific studies, from many directions, show that landscapes dominated by clear cuts and corporate tree plantations are far less resilient to climate change because they exacerbate the effects of [wildfires](#), [water shortages](#), flooding, insects, disease, [wind damage](#), landslides and harmful algae blooms.

- 6) Federal wildland fire policy is increasing fire risk. Overzealous logging and thinning projects ostensibly designed to reduce fire risk on federal public lands can [increase that risk through a number of channels](#). These include homogenizing stand structure (lots of little trees jammed together), creating piles of flammable logging slash, increasing human access and the likelihood of new human-caused fires, removing trees that would retard the velocity of winds fanning flames, increasing surface temperatures, and spreading invasive grasses that are highly combustible and reducing onsite moisture. Removing the commercial component of these projects (i.e. no commodity sales) is key to scaling them back to ecologically sound dimensions. The emphasis on federal public lands for these projects is misplaced. Timber plantations prevalent on corporate lands burn [hotter and faster](#) than natural forests, so the continued management for these plantations is a public health and safety risk.
- 7) Carbon-rich forests on public lands are being depleted. Logging on public lands is obliterating some of the world's most carbon dense forests. For example, planned logging in old growth and roadless areas on the Tongass National Forest and on national forest and BLM lands in the Pacific Northwest will destroy forests that exhibit carbon densities up to five times that found in tropical forests.
- 8) Harmful subsidies. Much of the climate damage associated with logging of US forests is subsidized through various federal, state and local programs. These subsidies take the form of property-tax exemptions or special rates for forestland, logging roads and logging equipment; corporate income-tax exemptions; grants, loans, technical assistance, and cost-share assistance for mills, [biomass facilities](#), and logging infrastructure. They also take the form of below-cost offerings of timber from public lands. Taxpayers currently provide subsidies of [nearly \\$2 billion per year to the federal logging program](#).
- 9) Antiquated state forest practices laws. State forest-practices laws are incompatible with the goals of increasing forest carbon sequestration and storage. These antiquated laws were largely written to help industrial landowners provide minimal levels of protection for the environment and communities, and are ill adapted to the challenges posed by climate change.

Responsive policies for Congress, the next President and states

- 1) End the commercial logging program on public lands. The economic value of public forestlands for carbon storage and other ecosystem services, including biodiversity protection, far exceeds their value for production of timber and other extractive resources. When they are logged, local economies and the climate suffer economic damages. In Oregon, climate-related damages from logging on public forests is at [least 10 times and perhaps more than 80 times revenues earned from timber sales](#). The commercial logging program should be defunded and otherwise phased out on all Forest Service and BLM lands, and additional protected federal public forestlands should be acquired from willing sellers, especially in regions with few federal public lands, like the southeastern US. [States can adopt similar policies](#) for state and county owned forests.
- 2) Establish forest-carbon reserves. Establish forest carbon reserves as a requirement for all public forestlands. Such reserves should be off limits to logging or other extractive uses

and should be drawn around all remaining tracts of native (unlogged) forestlands since these lands represent the last vestiges of high-density forest carbon stocks in the nation. The reserves should also encompass high productivity lands that may have been logged previously but can be managed through proforestation to achieve high carbon densities over time.

- 3) Define meaningful carbon-storage targets. Establish forest carbon-storage targets for each national forest or BLM district. These should reflect the carbon-density representative of unlogged native, old-growth forest. Management activities would be required to move towards, and not away from such targets.
- 4) Decouple agency funding from logging. Until the federal logging program can be phased out, decouple funding for line items described as forest and watershed restoration, fire risk reduction and forest health from the revenue streams generated by timber sales. Congress should fund these activities directly instead of allowing the Forest Service and BLM to retain timber sale revenues and recycle them into these programs. This would eliminate the perverse incentive to contaminate legitimate restoration activities with commercially valuable timber of interest to purchasers.
- 5) Enact the next generation of corporate farming and forestry laws. Corporate farming laws are on the books in [nine states](#) that restrict ownership or management of prime farmlands by large, foreign, and investor-driven corporations. A next generation of these laws should be adopted nationwide to include productive forest lands as well. This will stimulate a transfer of US forestlands out of absentee corporate ownership and back into the hands of family foresters and smaller scale, sustainable businesses who have the capacity and long-term commitments needed to safeguard the nation's food, water, and fiber security through climate smart practices as climate change unfolds. This transition also will boost jobs and strengthen rural communities.
- 6) Adopt a no-net-loss policy (NNL) for private forestlands. Similar to the nation's wetlands mitigation program goals, NNL here would require the federal government and states to ensure that any forestland converted to other uses or degraded by clearcut logging be offset by an ecologically equivalent set aside of land that can be restored to its natural forested condition and not managed as a timber plantation.
- 7) Reform climate-harmful subsidies. All forms of federal, state, and local government financial assistance to forestland owners should be conditioned upon landowner commitments—through approved management plans—to climate-smart practices such as long rotations, alternatives to clearcutting, and re-establishment of natural forests where timber plantations now exist. In addition, governments should stop financial support—in the form of tax credits, low interest loans, industrial development bonds, and other expenditures—for new mills and biomass facilities that stimulate wasteful consumption of carbon-intensive wood products. Finally, consumption subsidies for paper and wood products should be shifted to non-wood substitutes whenever possible, such as through changes in public procurement expenditures.
- 8) Add emissions from logging and wood products to GHG inventories. When GHG inventory methods were first developed, the timber industry was given the leading role in

shaping accounting rules for the logging and wood products sector. The result—described by international monitors at the time—were rules “[written by loggers for loggers](#).” Unlike agriculture, those rules excluded the logging and wood products sector entirely. Methods and sources of information are [readily available](#) to supplement national and state-level GHG inventories with estimates of emissions from this sector.

- 9) Incorporate a climate test in NEPA analysis. All forest management plans and projects on federal public lands should be subject to a strict climate test that ensures that selected alternatives (1) lead to a reduction in atmospheric greenhouse-gas concentrations; (2) increase carbon sequestration capacity; (3) rebuild forest carbon stocks, (4) protect forest soils, and (5) improve the ability of US forestlands to withstand predicted increases in drought, wildfires, storms, floods, harmful algae blooms, and outbreaks of insects and disease. National Environmental Policy Act (NEPA) procedures should be updated to require this. Some states have state environmental policy acts (SEPA) that can be similarly updated.
- 10) Develop a tax-and-reward program for forest carbon. Carbon taxes work most effectively if technologies to reduce emissions are ready to deploy at scale but need financial incentives for more ubiquitous uptake. This is the case with US forests. Alternatives to carbon-intensive forest practices exist (i.e. variable density thinning and other selective harvest methods) and provide an economically feasible option for forestland owners with long term commitments to the land. A [forest carbon tax-and-reward program](#) would incentivize these practices by levying a tax on logging-related emissions associated with conventional, industrial forest practices and using proceeds to help small landowners reduce the costs of implementing climate-smart alternatives that boost the storage of forest carbon. Proceeds would also be used to acquire forestlands to be put in the public domain and managed for long-term carbon storage.
- 11) Modernize state forest-practices laws. State forest-practices laws [need to be modernized](#) to make climate-smart forestry the law and not the exception. Key elements should include requirements for forest-management plans and carbon-storage targets for large corporate owners, science-based buffers for aquatic ecosystems, set-asides for developing carbon rich mature and old growth forests, and mechanisms for public participation.
- 12) End carbon-neutrality designations for forestry biomass energy. Burning woody biomass is not instantaneously carbon neutral [under any scenario](#). Bioenergy emissions must be accounted for in federal greenhouse gas reduction policies, including carbon pricing legislation. Congress cannot legislate the science, and should remove the [legacy rider](#) that pro-biomass industry advocates have inserted in the federal budget for the past several years that falsely assumes carbon neutrality of forest biomass. Woody-biomass emissions can take [decades to more than a century for new tree growth to offset](#), assuming regrowth of harvested forests truly happens. This is well beyond the timescale relevant for climate action.
- 13) Eliminate renewable energy subsidies for forest biomass energy. The US biomass industry has been heavily subsidized through state and federal renewable energy (RE) programs, including direct grants, stimulus funding, production and investment tax credits, federal loan guarantees, and rate-payer subsidies. Taxpayers and ratepayers have

spent more than a quarter of a billion dollars since 2008 to keep [Maine](#)'s failing biomass industry afloat. Across the country, tens of millions of dollars in [federal stimulus funds](#) went to biomass power plants that have been plagued with cost overruns, air and water violations, lawsuits, and early closures. With certain exceptions, such as in [Massachusetts](#) and [DC](#), biomass power plants do not have to meet any emissions or efficiency criteria to be eligible for renewable energy credits (RECs), and therefore compete directly with zero-emission RE technologies such as solar and wind for the same resources, with negative outcomes for ratepayers, the environment, and communities where these facilities are located (stack emissions from biomass power plants exceed those of coal plants per unit of energy for both [CO₂](#) and many [harmful co-pollutants](#)). A study of [Maryland's RPS program](#), for instance, found that the RECs it purchased had higher carbon dioxide emissions than Maryland's normal electricity supply. Forest biomass energy – whether for electricity, heat, or transportation - should not be incentivized through state or federal renewable energy programs.

- 14) [Close international biomass loopholes](#). The massive increase in industrial-scale wood pellet production, particularly in the US Southeast, for export to Europe and other overseas markets is tied directly to international policies that [fail to account for bioenergy emissions](#) as well as [generous renewable energy subsidies for bioenergy](#). Forests in the southeastern states are being massively exploited to meet international demand for woody biomass fuel to burn in industrial-scale power plants as so-called “carbon neutral” and “renewable” energy. The harvesting, production, and transport of industrial wood pellets [devastates critical forestland, harms the health of communities and the environment, and compounds environmental injustices](#) in poor, rural communities of color. The US and Congress must act as global leaders in closing these loopholes in the United States and thus set an example for other countries.
- 15) [Carbon removal and negative emissions: we need to grow our trees, not burn them](#). The IPCC has concluded that limiting dangerous temperature rise will require both deep GHG emissions reductions and carbon dioxide removal (CDR) to compensate for residual emissions and for delays in implementing emissions reductions. Protecting existing forests to maximize their carbon storage and ecological potential – known as [proforestation](#) - is the most effective and low cost approach to achieve this goal and can be put to work immediately across all forest types. Ecologically appropriate [forest restoration](#) and [afforestation](#) also offer tremendous carbon sequestration potential. While many climate models have advanced bioenergy with carbon capture and storage (BECCS) as a means to achieve “negative emissions,” this is based on the [false premise](#) that bioenergy is carbon neutral and does not take into account the progressive loss of forest carbon sequestration and storage potential with every additional rotation of logging. [The IPCC 1.5 report](#) includes a pathway for limiting temperature rise to 1.5° C without relying on BECCS. In order to maximize nature-based solutions such as reforestation and protection of standing forests, this model requires scaling back bioenergy to 2010 levels. We must immediately begin to shift away from logging for bioenergy, just as we are working to move beyond fossil fuel consumption, and we must not defer action by relying on hypothetical future deployment of unproven, unscalable, and environmentally risky solutions such as BECCS.

Implementation of forest carbon policy recommendations:

Implementing these policy proposals will require a mix of: (1) new policies that have yet to be drafted into legislative or rule making form; (2) policies that have been drafted at the federal or state level or are already being implemented by states in relevant form, and (3) policies that can be implemented with no new legislative authority. The following table provides a rough sense of what is needed.

Policy	New policy proposal	Drafted or in place in states	No new legislative authority needed
End public lands logging		x ¹	
Forest carbon reserves			x ²
Carbon storage targets			x ²
Decoupling	x		
Corporate ownership laws		x ³	
No net loss of forest cover		x ⁴	
Rescind and redirect subsidies		x ⁵	
Update GHG inventories			x ⁶
NEPA climate test			x ⁶
Forest carbon tax and reward		x ⁷	
Modernize forest practices laws		x ⁸	
Reject subsidies for biomass energy in the federal budget		x ⁹	
Eliminate RE subsidies and other incentives for woody biomass		x ¹⁰	
Efficiency requirements for biomass eligibility in RES		x ¹¹	
Close international loopholes	x		
Include bioenergy emissions in carbon pricing policies		x ¹²	

¹ John Muir Project (2019), *The Forests and Climate Act of 2019*.

² Geos Institute (2017), *Executive Order: A National Carbon Trust on Federal Public Lands*.

³ An overview of corporate ownership laws on the books in nine states can be [accessed here](#).

⁴ ‘No-net-loss’ is currently the national policy goal for US wetlands and can easily be adapted to forests.

⁵ See, e.g. [HB 2659](#) (Oregon, 2019).

⁶ The EPA and equivalent agencies at the state level have discretion to do these already. In addition, legal frameworks such as the Principles and Requirements for Federal Investments in Water Resources require discussions and analysis of climate impacts.

⁷ See, e.g. [LC 2875](#) (Oregon, 2017).

⁸ See, e.g. [HB 3226](#) (Oregon, 2017).

⁹ See, e.g.:

- Senate budget rider declaring forest biomass energy as carbon neutral ([S. 2580](#), Sec. 427, FY 2020 Interior, Environment, and Related Agencies Appropriations Bill; see

10/31/19 [joint letter](#) from 16 national environmental organizations opposing this budget rider.

- Senate [appropriations bill report](#) to accompany S.2580 contains provisions on “Biointermediates” and “Electric Pathway” that would facilitate the use of woody biomass fuel in the Renewable Fuel Standard.
- House [GREEN Act](#) discussion draft proposing extension of production and investment tax credits for biomass, biofuels, CCS, and waste-to-energy and new energy efficiency incentives for residential biomass heating.

¹⁰ See NY’s Climate Leadership and Community Protection Act, NYS Laws of 2019, Ch. 106, for a model renewable energy definition.

¹¹ See [Massachusetts](#) and [District of Columbia](#) Renewable Energy Portfolio Standards.

¹² See, e.g. [H 2810](#) (Massachusetts, 2019).

We appreciate the opportunity to provide input on this critical dimension of the nation’s evolving climate agenda and look forward to meeting with you and other members of the Committee to discuss these issues in more detail.

Sincerely,

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Alliance for Democracy
Bark
Battle Creek Alliance & Defiance Canyon Raptor Rescue
Biofuelwatch
Brighter Green
Center for Biological Diversity
Center for Sustainable Economy
Climate Action Now; Regenerative Farming, Forests & Food Committee
Coastal Plain Conservation Group
Dogwood Alliance
Earth Ethics, Inc.
Elders Climate Action of Massachusetts
Environmental Protection Information Center
Forest Carbon Coalition
Forest Web of Cottage Grove
Franciscan Action Network
Greenpeace USA
Greenenvironment, LLC
Gulf Coast Center for Law & Policy
Indiana Forest Alliance
John Muir Project
Klamath Forest Alliance
Lakelands Citizens for Clean Air, Inc.
Last Tree Laws
Mass Forest Rescue
New Jersey Highlands Coalition
New Jersey Forest Watch / Friends of Sparta Mountain
North American Climate, Conservation and Environment (NACCE)
North Cascades Conservation Council
Old-Growth Forest Network
Partnership for Policy Integrity
Plastic Ocean Project
Rachel Carson Council
Raritan Headwaters
RESTORE: The North Woods
Rust Temple
San Juan Citizens Alliance
South Carolina Wildlife Federation
Southern Forests Conservation Coalition
Spruill Farm Conservation Project
The Enviro Show
Virginia Association for Biological Farming
Wendell State Forest Alliance
Wild Nature Institute
WildEarth Gardens