

Congress of the United States
U.S. House of Representatives
Committee on Small Business
2561 Rayburn House Office Building
Washington, DC 20515-6515

MEMORANDUM

TO: Members, Subcommittee on Underserved, Agricultural, and Rural Business Development
FROM: Jared Golden, Chairman
DATE: September 29, 2021
RE: Subcommittee Hybrid Hearing: “Sustainable Forestry’s Role in Climate Solutions”

The Committee on Small Business Subcommittee on Underserved, Agricultural, and Rural Business Development will meet for a hybrid hearing entitled “Sustainable Forestry’s Role in Climate Solutions”. This hearing is scheduled to begin at **10:00 A.M. on Wednesday, September 29, 2021, in person in Room 2360 of the Rayburn House Office Building, and virtually via the Zoom platform.**

As the Federal Government considers options for infrastructure investments and ways to help mitigate and adapt to climate change, the forestry sector offers multiple avenues to address these goals while also promoting small business development in rural and underserved communities. Sustainable forest management can provide economic and social benefits to meet the needs of present and future generations and also play a fundamental role in the natural resource infrastructure of our nation. This hearing will allow members to learn more about the role of sustainable forestry and how small businesses across this sector are helping to address climate change.

Panel

- Mr. Dana Doran, Executive Director, Professional Logging Contractors of Maine, Augusta, ME
- Dr. Adam Daigneault, Associate Professor, School of Forest Resources, University of Maine, Orono, ME
- Mr. Mark Thibodeau, Regional Manager, ReEnergy, Stratton, ME
- Mr. Scott Dane, Executive Director, American Loggers Council, Gilbert, MN

Background

The United States has over 800 million acres of forests and woodlands.¹ These tremendous natural resources cover about 33% of our country and provide numerous environmental and economic benefits. Forests and woodlands provide the raw material for numerous forest products and as well as space for outdoor recreation industries. Additionally, forests are vital habitat for wildlife and

¹ Sonja Oswalt, et. al., *Forest Resources of the United States*, USDA (2017), https://www.fs.fed.us/research/publications/gtr/gtr_wo97.pdf.

improve water and air quality for all life. In the United States, approximately 57% of the forested land base is privately owned—by families, corporations, investment funds, and other entities.² National Forests, managed by the U.S. Forest Service, account for 35% of reserved forest land across the country.³ In both public and privately owned forests, the health and continued viability of our forest lands is dependent on appropriate forest management and sustainable forestry.

Sustainable Forestry

Sustainable forestry is the science and art of managing forests to support the natural forest resources and ecosystem services that we need now and in the future.⁴ Sustainable forest management integrates the production of useful renewable forest products with conservation of healthy and diverse forest ecosystems, incorporates practices including planting seedlings and natural seeding, conserving soil and water, maintaining wildlife and fish habitat, and protecting air and water quality.⁵ Recognizing the challenges facing forests, sustainable forestry practices include protecting forests from wildfire, pests, and diseases, and preserving forests. The field has evolved from practices that were focused on maximizing timber values to approaches that are deeply rooted in ecology, science, and principles of sustainability.⁶

Across the country sustainable forest management is verified by a host of independent sources. Forests in the United States are certified through three main certification programs: the American Tree Farm System (ATFS), Forest Stewardship Council (FSC), and Sustainable Forestry Initiative (SFI).⁷ Certified forests undergo annual inspections to verify that standards of responsible forest management are being followed. These standards include protections for wildlife habitat, water and soil resources, and many other environmental safeguards. Certification standards also address the risks of illegal practices, assurance of worker safety, fair labor practices, and other social and community considerations that are applicable to small businesses across the forestry products supply chain.⁸

Small businesses play a key role in sustainable forestry, across the forestry supply chain. From landowners who generate revenue from the sale of sustainably harvested timber, foresters who manage the land, loggers and truckers who cut and haul the timber, to businesses that mill and process lumber and companies that produce finished forestry products, small businesses play vital roles in forest products sectors. Fostering growth in sustainable forestry, forest recreation, and healthy markets for forest production can help put more people to work, as well as support small businesses in production, recreation, and supporting forest health.⁹ These jobs, largely in rural communities, can support workforce development.¹⁰

² WoodWorks, *Sustainable Forestry in North America*, <https://www.woodworks.org/wp-content/uploads/IS-Forestry.pdf>.

³ Oswalt, et. al., *supra* note 1.

⁴ Penn State Extension, Sustainable Forestry (Sept. 8, 2016), <https://extension.psu.edu/sustainable-forestry>.

⁵ *Id.*

⁶ WoodWorks, *supra* note 2.

⁷ *Id.*

⁸ *Id.*

⁹ Adam Fetcher, *America's Forgotten Forests*, Center for American Progress, March 23, 2017.

¹⁰ *Id.*

Climate Change and Solutions

The impacts of climate change on forest health are increasingly evident around the country. Across the nation unpredictable temperature changes, drought, fire, and invasive pests have had impacts on the health and viability of forest resources.¹¹ However, protecting and managing forests sustainably can help protect forests and ensure that they are a stabilizing force for the climate. Forests play an essential role in climate regulation, as key ecosystems the planet uses to remove carbon dioxide (CO₂) from the atmosphere.¹² Through natural processes, carbon is sequestered by forests and stored in both trees and forest soils. Given the important role that forests play, halting deforestation and forest degradation are necessary elements of climate solutions.¹³ To realize their climate solution potential, forests must remain forests rather than being deforested for some other use, such as agriculture or development.¹⁴

Sustainable forest management can maintain, or restore, the carbon sequestration function of a forest.¹⁵ Maintaining forest cover, and ensuring its quality through sustainable forest management, is an important part of effective climate solutions.¹⁶ Forest owners and small businesses are well positioned to optimize the carbon potential and support climate solutions across the working forest value chain through sustainable forest management and the manufacture of sustainable forest products.

Healthy Forests and Healthy Economic Opportunities

Healthy forests are essential, not just for ecosystem services and removing greenhouse gas from the atmosphere, but for the small businesses and communities that rely on the forests for jobs and for Americans that regularly rely on forest products. Healthy markets for forest products are critical to supporting small business and providing economic incentives for working forest retention and rehabilitation. Additionally, demand for forest products from sustainably managed working forests can help support healthy forest management and can lead a reduction in the fuel load in forests, and in turn, lessen the risk of wildfire.¹⁷ Because wood and forest products from healthy sustainably managed sources have many attributes that promote climate solutions, there are opportunities for small businesses across the forest products supply chain. Through innovation, entrepreneurship, and infrastructure development working forests can be critical supporters of local economies and small businesses across the country.¹⁸

Wood and forest products can displace fossil fuel intensive materials with renewable forest products. Long before coal, oil, and natural gas people have used wood for cooking, heating, and lighting. Woody biomass, such as waste from logging and milling, can be used in industrial

¹¹ USDA FOREST SERVICE, CLIMATE CHANGE PRESSURES IN THE 21ST CENTURY (May 25, 2021).

¹² Forest Stewardship Council, *Forest, Climate Change, and the Forest Stewardship Council* (May 2016).

¹³ International Union for Conservation of Nature, *Forests and Climate Change* (Feb. 2021)

<https://www.iucn.org/resources/issues-briefs/forests-and-climate-change>.

¹⁴ Forest Stewardship Council, *supra* note 12.

¹⁵ International Union for Conservation of Nature, *supra* note 13.

¹⁶ *Id.*

¹⁷ USDA FOREST SERVICE, FOREST SERVICE WOOD ENERGY TECHNICAL ASSISTANCE TEAM: TAKING WOOD ENERGY PROJECTS FROM CONCEPT TO REALITY (March 2021).

¹⁸ American Forest Foundation, *Policies that Help Family Forest Owners Capture More Carbon*, <https://www.forestfoundation.org/carbon-markets>

applications to produce steam and electricity, reducing use of fossil fuels.¹⁹ Wood is also used in homes throughout the United States for heating in fireplaces and wood-burning appliances, and as pellets in pellet stoves. Wood fuel has several environmental advantages over fossil fuels, as it is renewable resource, offering a sustainable, dependable supply. Additionally, wood fuel contains minimal amounts of sulfur and heavy metals, minimizing the threat of acid rain pollution and particulate emissions.²⁰ Research and development of renewable energy projects using local, sustainably sourced wood residues can offset the use of fossil fuels.²¹ This saves money, sustains local economies, and keeps our forests healthy.

Additionally, wood as a building material requires less energy across its life cycle than other structural building products, and is better for the environment in terms of greenhouse gas emissions, as well as air and water pollution.²² One of the reasons for this is that wood grows naturally, using energy from the sun, and the fossil fuel-based energy needed to manufacture wood into products is very low compared to other construction materials.²³ Additionally, durable wood products such as building materials and furniture store large amounts of carbon, keeping it out of the atmosphere long-term.²⁴ Technological innovation in the forestry products sector, supported by government and the private sector, has helped develop new products and support entrepreneurship in areas such as mass timber, cross-laminated timber, and wood insulation.²⁵ Overall, new products and markets for forestry products can continue to support entrepreneurship and economic development.

Beyond markets for wood products, developing carbon markets can offer opportunities to empower family forest owners to act on climate issues and leverage private investment for ecosystem services of forests.²⁶ Carbon markets appeal to landowners because they can provide forest owners with an avenue for generating income from their land and provide additional value from forests. There are two distinct types of carbon markets. Voluntary markets exist where companies or individuals buy carbon credits for purely a voluntary reason. Many companies voluntarily purchase carbon credits to demonstrate their commitment to protecting the environment and to demonstrate corporate social responsibility.²⁷ Compliance markets arise when laws or regulations are enacted that limit or cap the quantity of emissions, such as cap-and-trade programs.²⁸ The emitters can either reduce emissions to the atmosphere or buy carbon credits from sellers who are sequestering carbon from the atmosphere. Within both markets, project developers and landowners must be able to show that their forests are sequestering more carbon than a

¹⁹ US ENERGY INFORMATION ADMINISTRATION, BIOMASS EXPLAINED (May 11, 2021).

²⁰ USDA FOREST SERVICE, FOREST PRODUCTS LABORATORY, TECHLINE (April 2004).

²¹ USDA FOREST SERVICE, TAKING WOOD ENERGY PROJECTS FROM CONCEPT TO REALITY, FS-1161(b) (March 2021).

²² Roger Sathre and Jennifer O'Connor, Synthesis of Research on Wood Products & Greenhouse Gas Impacts, 2nd Edition, Technical Report No. TR19R, 2010, <https://www.canfor.com/docs/why-wood/tr19-complete-pub-web.pdf>

²³ WoodWorks, *supra* note 2.

²⁴ *Id.*

²⁵ USDA FOREST SERVICE, WOOD PRODUCTS INNOVATION, FS-1161(a) (March 2021).

²⁶ American Forest Foundation, *supra* note 18.

²⁷ Rajan Parajuli, et. al., An Introduction to Forest Carbon Offset Markets, NC State Extension (July 10, 2019) <https://content.ces.ncsu.edu/an-introduction-to-forest-carbon-offset-markets>.

²⁸ *Id.*

‘business-as-usual’ scenario. Currently, carbon markets are often inaccessible to small forest owners, due to complexity, high upfront costs and contract length.²⁹

In addition to markets for forest products and carbon, forests provide important area for outdoor recreation. Outdoor recreation has proven to be a leading economic driver in contemporary American society and supporting numerous small businesses. A report released by the U.S. Bureau of Economic Analysis found that outdoor recreation accounted for 2.2 percent of current-dollar GDP, about \$427.2 billion.³⁰ Beyond the direct value and employment that the outdoor recreation industry provides, the outdoor recreation economy generates approximately \$124.5 billion in federal, state, and local tax revenue per year.³¹ In many forest areas around the country outdoor recreation industries support not only small businesses but serve as an important tax base for towns and rural communities.

Conclusion

Healthy forests regulate ecosystems, protect biodiversity, play an integral part in the carbon cycle, support livelihoods, and supply goods and services that can drive sustainable growth. Given the increasing global demand for low-carbon materials, forest products innovation and market development for sustainable forestry products can directly benefit the health of our nation’s forests and their continued ability to mitigate climate change through carbon storage - all while providing new opportunities for small businesses. Sustainable forestry can provide positive economic and social outcomes to meet the needs of present and future generations.

²⁹ Tom Martin, *Mr. Secretary, Start With American Rural Family Forest Owners to Help Tackle Climate Change*, AgriPulse, Feb. 24, 2021.

³⁰ U.S. Dep’t of Comm., Bureau of Econ. Analysis, *Outdoor Recreation Satellite Account, U.S. and Prototype for States, 2017* (last updated Sept. 20, 2019), https://www.bea.gov/system/files/2019-09/orsa0919_1.pdf

³¹ Outdoor Industries Assoc., *The Outdoor Recreation Economy* (April 25, 2017).