SUSTAINABLE FORESTRY'S ROLE IN CLIMATE SOLUTIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON UNDERSERVED, AGRICULTURAL, AND RURAL BUSINESS DEVELOPMENT

OF THE

COMMITTEE ON SMALL BUSINESS
UNITED STATES
HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

HEARING HELD
SEPTEMBER 29, 2021

Small Business Committee Document Number 117–033
Available via the GPO Website: www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE
45–582 WASHINGTON : 2021

HOUSE COMMITTEE ON SMALL BUSINESS

NYDIA VELÁZQUEZ, New York, *Chairwoman*
JARED GOLDEN, Maine
JASON CROW, Colorado
SHARICE DAVIDS, Kansas
KWEISI MFUME, Maryland
DEAN PHILLIPS, Minnesota
MARIE NEWMAN, Illinois
CAROLYN BOURDEAUX, Georgia
TROY CARTER, Louisiana
JUDY CHU, California
DWIGHT EVANS, Pennsylvania
ANTONIO DELGADO, New York
CHRISSY HOULAHAN, Pennsylvania
ANDY KIM, New Jersey
ANGIE CRAIG, Minnesota
BLAINE LUETKEMEYER, Missouri, *Ranking Member*
ROGER WILLIAMS, Texas
JIM HAGEDORN, Minnesota
PETE STAUBER, Minnesota
DAN MEUSER, Pennsylvania
CLAUDIA TENNEY, New York
ANDREW GARBARINO, New York
YOUNG KIM, California
BETH VAN DUYNE, Texas
BYRON DONALDS, Florida
MARIA SALAZAR, Florida
SCOTT FITZGERALD, Wisconsin

MELISSA JUNG, *Majority Staff Director*
ELLEN HARRINGTON, *Majority Deputy Staff Director*
DAVID PLANNING, *Staff Director*

CONTENTS

OPENING STATEMENTS

WITNESSES

APPENDIX

SUSTAINABLE FORESTRY'S ROLE IN CLIMATE SOLUTIONS

WEDNESDAY, SEPTEMBER 29, 2021

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
SUBCOMMITTEE ON UNDERSERVED,
AGRICULTURAL, AND RURAL BUSINESS DEVELOPMENT,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:04 a.m., in Room 2360, Rayburn House Office Building, Hon. Jared Golden [chairman of the Subcommittee] presiding.

Present: Representatives Golden, Carter, Delgado, Williams, Hagedorn, Stauber, and Salazar.

Chairman GOLDEN. Good morning, everyone. I call this hearing to order.

And, without objection, the Chair is authorized to declare a recess at any time.

I am going to begin in noting some important requirements. Let me first say that standing House and Committee rules and practice continue to apply during hybrid proceedings.

All Members are reminded that they are expected to adhere to standing rules, including the rules of decorum. House regulations require Members to be visible through a video connection throughout the proceedings, so keep your cameras on. Also, please remember to remain muted until you are recognized, in order to minimize background noise. If you have to participate in another proceeding, exit this one and log back in later.

In the event a Member encounters technical issues that prevent them from being recognized for their questioning, I will move to the next available Member of the same party, and I will recognize that Member at the next appropriate time slot, provided they have returned to the proceeding.

For Members and staff physically present in the Committee room today, in accordance with the attending physician's most recent guidance, Members and staff who attend this hybrid hearing in person will be required to wear a mask in the hearing room. Furthermore, all Members and staff who have not been fully vaccinated must maintain 6-foot social distancing. With that said, Members will be allowed to briefly remove their masks if they have been recognized to speak. That includes those who are here with us testifying today, as well Mr. Dane.

I will now do a quick brief opening statement, kind of brief; we will see.

In the State of Maine, we are home to a strong logging and forest products industry, and it has been that way throughout our history. Thousands of Mainers make their living in the woods or in mills, making things out of wood fiber.

The industry has faced tough times in recent decades for a variety of reasons, from trade policies, outsourcing of jobs, demand slumps, and more. The loggers and other forest products workers, many of them small businesses, love what they do, and they have kept at it as a way of making a good living and as a way of life.

That is important because small businesses in the forest products industry and the sustainable forestry they practice in Maine are primed to play an important role in the growth of renewable energy in combatting climate change in the years to come. It is a great opportunity for small businesses in rural heavily forested States like Maine and for the communities that they call home.

America's forests and woodlands are vast. These natural resources cover about a third of the country and nearly 90 percent of my State. These forests house diverse wildlife, improve air and water quality, sequester carbon dioxide, and provide critical resources for the U.S. and countries worldwide. Sustainable forestry seeks to manage forests to support the natural forest resources and ecosystem services we need now and in the future. These practices include protecting forests from wildfire, pests, and diseases, and preserving forests.

I am proud to say my home State of Maine has many landowners and businesses that use these practices. We have a healthy forest as a result.

Sustainable forestry can also help combat the impact of climate change, which has already begun to hurt forest health across the country. Unpredictable temperature changes, drought, fire, and invasive pests pose a fundamental threat to our beloved woodlands.

Fortunately, sustainable forestry can maintain and restore carbon sequestration in forests, helping to fight climate change and keep our forests intact. The people doing this sustainable forestry are often small businesses. As I said, they are logging operators, forest products companies, biomass facilities, and many more. These are folks who create jobs and keep their local economies moving, while keeping our forests healthy and contributing to efforts to mitigate climate change.

And as we are seeing, the market for the products that sustainable forestry produces is full of potential. Woody biomass, such as waste from logging and milling, can be used in industrial applications to produce steam and electricity, reducing the use of fossil fuels. Cross-laminated timber is being used in buildings in the U.S. and across the world. And innovative new forest products hit the market every year.

Keeping our forests healthy helps to promote sustainability, address climate change, and ensure that small businesses and workers in rural areas share in the economic benefits.

As Congress looks to address and mitigate the negative sides of climate change and bolster American small businesses with the bipartisan infrastructure bill and other legislation, we should support industries that help on both fronts.

I look forward to hearing from our witnesses about how policies can be put together here in Congress that will help them to be successful businesses, as businessowners, that will help them to continue to make a living the way that they choose and enjoy while also taking part in good sustainable forestry that makes for a healthy forest.

I would now like to yield to Mr. Stauber who is—I am sorry, I am not yielding to Mr. Stauber for opening statements; rather, recognizing Ranking Member Hagedorn for his opening statement.

And it is a real pleasure to be here with you today. Thanks for joining us. And I was very glad to find out you would be attending this morning.

Mr. HAGEDORN. I thank you, Chairman. Appreciate you holding this hearing. And I look forward to the witnesses' accounts. You could have yield to Mr. Stauber. He is quite an expert on these issues, and I look forward to hearing some of his comments in just a little bit.

Minnesota, like many places around the country, home to some beautiful forests and provide us incredible scenery, but also some awesome products that we use every day and we rely on every day. And this hearing is a lot about how we can help small businesses to continue to provide those types of products to the American people. And let's face it, there are distinct similarities in the economic challenges facing small businesses in any rural economy, whether it be agriculture, forestry, mining, or whatever sector. All rural economies are vital and important to the health of our country, and forest product sector is no different.

Forest products make up about 1.5 percent of the total U.S. economy and contribute about 5 percent of America's total manufacturing output. That is quite large when you think about it. And for many rural States, timber is the economic cornerstone contributing a substantial amount of employment income.

The timber provides higher than average wages, a variety of opportunities for employment, manufacturing sales, and a host of other economic opportunities, all contributing to a robust and dynamic rural forest economy.

Rural forest economies depend on the tireless efforts of small businesses executing forest management practices day in and day out. Historically, the timber industry has—primarily consists of small, multigenerational, family-owned businesses with less than 20 employees. People would think they are actually probably big companies. Not so. The margins generated by these businesses are slim. Just 1 to 3 percent on average. And they assume millions of dollars in bank loans for expensive logging equipment on top of daily operating needs.

So, you know, there is a lot at risk, a lot at play. Our small businesses are on the hook, and still those margins are very small. We have to do what we can to help.

This places significant financial pressure on small businesses to harvest timber year-round. Unfortunately, current events have exacerbated the economic challenges these small businesses are already facing in this industry. The COVID-19 pandemic shuttered schools, offices, and other industries reliant on paper. Pandemic-related closures of essential links and forestry supply chain, such as

mills and other wood consumers, have placed timber harvesters and haulers in a vise, threatening their incomes.

Compounding the problem are recent increases in operational expenses due to skyrocketing inflation, such as the rising cost of fuel, which has culminated in a 10 to 40 percent loss in revenue for many small businesses compared to the same timeframe in 2019.

Small businesses in the timber industry are also grappling with significant, longer-term economic consequences stemming from the recent heavy wildfire activity. Small businesses lost valuable logging equipment, suffered from idle operations, and saw their incomes go up literally in smoke as millions of acres of revenue-generating timber were badly burned or damaged. These losses will be felt for generations, as it takes decades for lands to be rehabilitated and new growth to mature for harvest.

Congress must work in bipartisan fashion to help better serve the forestry industry. One bill out there, H.R. 2612, the RESTORE Act, introduced by my friend, Congressman Doug LaMalfa of California, would allow for landscape sale of management projects to give foresters a more reliable access to federal timber, which often gets tied up with unnecessary litigation. This is especially important to the countless number of foresters who depend on a reliable source of federal timber and serve as partners in the Forest Service efforts to properly manage our forestlands to prevent fires.

Congressman LaMalfa offered the RESTORE ACT as an amendment to the agriculture bill. I was there and voted for it, but unfortunately it was blocked by the majority.

To close, I would like to highlight just one more challenge facing small businesses in the American forestry industry, namely, its aging and declining workforce. The Bureau of Labor Statistics projects that over 7,000 openings for logging workers, on average for each year over the next decade—so 7,000 jobs open each year for—during this next decade. This logging has been characterized as difficult, dirty, dangerous, and even declining. However, the adoption of modern technology is attempting to disrupt this perception, creating a more high-tech working environment from qualified and skilled tradesmen to mechanical engineers.

I hope from the testimony of our esteemed panel we will learn more about how we can reignite interest in this noble profession, grasp a better understanding of the economic realities, and try to have some good government policies in order to further their businesses.

With that, I yield back.

Chairman GOLDEN. Thank you.

I would like to take a moment to explain how the hearing will now proceed. Each witness has 5 minutes to provide a statement, and each Committee Member will have 5 minutes for questions. Please ensure that your microphone is on when you begin speaking and that you return to mute when finished.

We will now quickly introduce our witnesses.

Our first witness is Mr. Dana Doran, executive director of the Professional Logging Contractors of Maine. Prior to representing Maine's independent logging contractors, he served with both public and private organizations, including the U.S. Department of

Labor, the Maine Department of Labor, Central Maine Power Company, and Kennebec Valley Community College.

Thank you for joining us today, Dana.

Our second witness is Dr. Adam Daigneault—you will have to forgive me if I mispronounce this, sir—associate professor of Forest Policy and Economics at the University of Maine. He is the head of the UMaine Forest Policy and Economics Lab. His research focuses on a wide range of issues, including freshwater management, climate change mitigation and adaptation, and assessing the socioeconomic impacts of environmental policy on the natural resource sectors.

Thank you for joining us today.

And I can tell you they do amazing work, the University of Maine, and they are great partners with folks like the logging contractors and the forest products industry in the State.

Our third witness is Mr. Mark Thibodeau, regional manager for ReEnergy Biomass Operations in Maine. ReEnergy's bioenergy facilities transform sustainably sourced woody biomass, other wood waste, and other organic residues into renewable clean energy that provides power to thousands of homes and businesses in Maine. Mr. Thibodeau is a lifelong Mainer and a graduate of the Maine Maritime Academy.

Thanks for joining us today.

And Mr. Stauber will now introduce the minority witness.

Mr. STAUBER. Well, thank you, Chairman Golden and Ranking Member Hagedorn, for your leadership on this Committee. It has been wonderful to work with you.

You know, northern Minnesota is blessed to have a rich forest landscape and a robust logging and milling industry, acting as a keystone of our State's economic engine. Therefore, I look forward to the discussion ahead of us today on the role of small business and forest management and carbon sequestration.

First of all, forest management, and especially logging, means solutions. Forest management is a solution to preventing and mitigating wildfires. Forest management is a solution to ensuring sustainable public lands. Forest management is a solution in facilitating recreation. Forest management is a solution for economic development and job creation. And forest management is a solution to sequestration of carbon.

And all of these solutions through forest management is driven by the small business community. In my district and nationwide, tens of thousands of loggers work in private, county, State, and federally owned forests, creating jobs and finding solutions. So let's be clear, so-called climate solutions are impossible without logging and forest management.

For example, in Minnesota and throughout the nation, our loggers plant three trees for every one harvested. As we all know, these living trees sequester carbon and, towards the end of their lifecycle, create more jobs. On the other hand, a dead tree that falls into the woods isn't just a proverb; it emits carbon into the atmosphere and provides fuel for wildfires, multiplying its carbon intensity.

Our forests sequester 15 percent of American's carbon each year. But this is impossible without the proactive management and re-

forestation efforts of small logging companies throughout our nation. However, our logging businesses are discouraged due to this administration's mounting crisis and poor policymaking.

And here are several examples. Transportation fuel costs are up exponentially. Why? This administration opted to ban domestic oil and gas development and instead rely on OPEC to provide the fuels our small business truckers need to move the product to market. Skyrocketing energy prices and economic shutdowns endanger mills, meaning fewer markets for logs and timber products. Passage of big land bills and amendments that take federal lands completely offline mean our loggers can't proactively manage our forests, they can't clear dead trees, and they can't help to prevent wildfires.

Furthermore, older loggers are aging out of this profession. And because there is more land offline and fewer markets than ever before, the younger generation doesn't see the promise of those future logging jobs.

Burdensome regulations for public land management, coupled with lawsuit after lawsuit from activist groups, complicate project permitting and tie up projects in legal costs.

Moreover, this administration's nominee to lead the Bureau of Land Management endangers the lives of loggers. In Idaho, with tree spiking, a form of eco-terrorism, illustrating further hostility to these small business loggers. I don't know of a way to discourage logging more than to nominate someone who willfully put lives of loggers at stake as a leader of one of our largest land management agencies.

So in order for responsible forest management to continue, we need to support policies that encourage instead of discourage logging. We need cheap, reliable energy for transportation and the powering of our mills. We need to expedite the process for compliance. We need to reform our broken NEPA process and keep loggers in the woods, not in the courtroom.

We need to pass my own bill, the Healthy Forests for Hunters Act, which streamlines environmental reviews for timber projects on federal land that benefit wildlife habitat, simultaneously supporting forest management and boosting hunting opportunities nationwide. And we need to vote against land packages and amendments that halt responsible management.

We need to encourage loggers to grow into the profession with robust workforce—with a robust workforce, pipelines, and administrators of land management agencies that aren't a threat to our small business and our logging community.

If we do these things, we will empower our small business loggers and truckers to do what they do best, which is manage our forests, find solutions, including climate solutions.

With all that said, I am pleased to introduce a constituent of mine as the Republican witness today. Scott Dane currently serves as the executive director of the American Loggers Council, which represents nearly 10,000 small businesses and 50,000 employees and spans 30 States. Prior to this role, Scott served as executive director of the Minnesota Associated Contract Loggers and Truckers, our State's association representing the small businesses that play a key role in northern Minnesota's economy.

There are few who can speak with more authority than Scott on timber and transportation. As he tells us in his opening remark, our loggers are key to forest health and a thriving economy. As a once-in-a-half-a-century wildfire raged across northern Minnesota, the loggers Scott represents played a key role in creating fire breaks and working to mitigate the damage.

Scott, thank you for your advocacy, and thank you to the loggers for their hard work, and their families. I look forward to your testimony.

Mr. Chair, and I yield back.

Chairman GOLDEN. Thank you very much.

I am now going to go to our witness testimony. And we will begin with Mr. Doran, who is recognized for 5 minutes.

STATEMENTS OF MR. DANA DORAN, EXECUTIVE DIRECTOR, PROFESSIONAL LOGGING CONTRACTORS OF MAINE, AUGUSTA, ME; DR. ADAM DAIGNEAULT, ASSOCIATE PROFESSOR OF FOREST POLICY AND ECONOMICS, UNIVERSITY OF MAINE, ORONO, ME; MR. MARK THIBODEAU, REGIONAL MANAGER, REENERGY STRATTON LLC, CARRABASSETT VALLEY, ME; AND MR. SCOTT DANE, EXECUTIVE DIRECTOR, AMERICAN LOGGER COUNCIL, GILBERT, MN

STATEMENT OF DANA DORAN

Mr. DORAN. Good morning, Chairman Golden, Ranking Member Hagedorn, and Members of the Committee on Small Business, Subcommittee on Underserved, Agricultural, and Rural Development. My name is Dana Doran, and I am the executive director of the Professional Logging Contractors of Maine.

The PLC of Maine is the voice of independent logging and associated trucking contractors throughout the State of Maine. Our organization was formed in 1995 to provide contractors with a voice in a rapidly changing forest industry. I appreciate the opportunity to speak before you today.

As of 2017, logging and trucking contractors in Maine employed over 3,900 people directly and were indirectly responsible for the creation of an additional 5,400 jobs. This employment and the investments that contractors make contribute more than $620 million to our State's economy each year. Our membership, which includes about 210 contractor Members, employs over 2,500 people and is responsible for 80 percent of Maine's annual timber harvest.

Thank you very much again for providing me the opportunity to testify on behalf of our membership in the state regarding sustainable forestry's role in climate solutions. Thanks as well for recognizing the work of our national partner with the American Loggers Council and having Mr. Dane before you today.

Whether it is here in Maine or across the United States, the timber harvesting community is a vital part of the responsible management of our nation's forests, as well as a vital partner in creating solutions for preservation of our climate.

Many on this Committee might find it odd for a trade association that represents loggers and truckers in the state, typically a conservative group, to stand before you today to discuss how timber harvesting can be part of the solution and not part of the problem

as it relates to climate change. With that in mind, I can say with great honesty that this perception is not reality when it comes to Maine's logging and trucking community.

Over the last 20 years, we have learned to recognize and prepare for our role in climate mitigation through our work on the ground. We have been accustomed to wildly changing weather patterns, mud seasons that extend not just weeks but months, and the influence of invasive species and pests in the forest. As a result, the timber harvesting community has been required to adapt quickly.

Two decades ago, our Members could work between 46 and 52 weeks a year. Mud season was restricted to the months of April and May, but now, our members are limited to work between 38 and 44 weeks per year. It is clear to Maine's legacy industry that climate and weather patterns have indeed changed, and this change is adding cost and lowering profitability.

During the same time, there has been an ad hoc approach to both technology and public policy. While well intended public policy changes for the respective mandates have brought about positive change on one side, I can tell you that they have had a negative impact upon our industry.

One primary example of this is the use of tier 4 engines, which has been mandated by both Congress and the federal government. While the technology has been positive in terms of curbing emissions, and we have fully adopted it, it has also added cost in terms of 25 to 50 percent to every piece of equipment used in this industry over the last 10 years.

Loggers and truckers are price takers and have no ability to charge more for the work that they do. And so it is our opinion that changes like this can have a positive impact, but you have got to take into consideration the negative impacts at the same time. Loggers and truckers were never included in the discussions that took place in Congress related to this policy change, and, therefore, we just ask that going forward we are included for any future changes that take place.

From a state perspective, I would like to touch upon what Maine has done in terms of a leadership role. Our current Governor, Governor Janet Mills, has created a climate council as well as a forest carbon task force. I have been a Member of both the climate council as well as the forest carbon task force over the last two years.

In terms of the Mills administration climate action plan, it has been very obvious that forests are part of a carbon storage and climate mitigation strategy, especially timber harvesting contractors. But, there must be incentives to promote high-quality, on-the-ground performance by loggers and investment in low-impact harvesting equipment. To achieve both goals, contractors must work to reduce emissions and minimize impacts, but there must be financial incentives to do so.

Here in Maine, we have something called the Direct Link Loan Program, which has been funded by U.S. EPA water quality funding. It has been a help to lower the cost of harvesting equipment, but at the same time we don't have enough funding. And I would ask this Committee to consider including more funding for that program and making it a statewide—excuse me, a nationwide program.

Lastly, our Master Logger Program, which we created here in the State of Maine back in the year 2000, which is the world's only third-party certification program for logging contractors, has now been adopted in 19 other States and has been adopted in three other foreign countries and is on target to expand to an additional three other foreign countries in the future. It is similar to the Forest Stewardship Council as well as in addition to the Sustainable Forestry Initiative.

And I would ask that Congress take a hard, fast look at this and try to adopt it for federal agencies, federal forests. We would like to see the federal government actually adopt it as a requirement for working on federal forests, not just forest management standards with SFI and FSC, but also look at third-party certification for timber harvesting contractors at the same time.

In my written testimony today, you will see the benefits of the Master Logger Program, where it has been adopted, why it is so important, and why third-party certification of logging companies and not just training for loggers is more important in the long run.

So, with that, I think I have come to the end of my testimony. I am happy to answer any questions at the end of the hearing by any Members.

And, again, I would like to thank Congressman Golden and Ranking Member Hagedorn for inviting me today and participating before the Committee. Thanks very much. Appreciate your time.

Chairman GOLDEN. Thank you.

Dana, you got to see if you can screen-share some photos of me on some of the equipment up there for the Members down here, driving around, you know, learning a thing or two.

But it is a great program he was talking about. We will have more time to talk about it later.

Next up—I am not going to do you the disservice of butchering your last name. Adam, you are up. And you can call me Jared anytime.

You are still on mute.

STATEMENT OF ADAM DAIGNEAULT

Mr. DAIGNEAULT. My apologies.

All right. Thank you, Chairman Jared Golden, Ranking Member Hagedorn, and Members of this Subcommittee, for holding this hearing today and the opportunity to testify on this important topic. My name is Dr. Adam Daigneault, or Daigneault—as our namesake comes from your hometown of Lewiston, Jared—and I am an associate professor of Forest Policy and Economics here at University of Maine. I have been working on issues related to forest management economics and policy for nearly two decades.

Forests across the globe are highly valued for their diverse ecosystem services, including timber, fiber, and fuel resources, carbon sequestration, freshwater habitat, recreation, and cultural values.

As noted by Member Hagedorn's opening remarks, across the U.S., forest-related businesses support at least 3 million jobs and generate around 5 percent of total manufacturing GDP. However, forest resources across the country face increasing pressures from shifting markets, land use change, policy, and climate change.

U.S. forest systems, ecosystems, and the wood they produce are a large carbon sink. Our forest sector removes more than 12 percent of annual greenhouse gas emissions. And while forest carbon stocks are increasing in this country, it is uncertain if this trend will persist with changing socioeconomic and climatic conditions. Thus, forests have an immense potential to help mitigate climate change if landowners are provided adequate incentives and technical assistance.

Forest carbon is a low-cost climate solution, and nationwide sequester rates could double with the proper incentives. For example, Maine's forest and wood products already remove about 70 percent of the State's annual greenhouse gas emissions, expect to be a huge contributor to achieving their net-zero emissions target by 2045.

Sustainable forest management and harvests are key to enhancing forest carbon sinks. Without this, forests grow slower, are less resilient to climate change, and sequester carbon at lower rates. And a wide range of sustainable forest management practices should be used to promote climate solutions while maintaining timber supply. These include quickly regenerating sites with climate change resistant species, reducing the risk of loss to natural disturbance, conducting treatments to increase growth, and using efficient, climate-friendly harvesting practices.

Markets are really key to maintaining the health and sustainability of our forests. Finding new uses for wood and supporting rural communities to ensure vibrant workforce can improve forest health. Robust and stable timber markets enable to carefully plan harvest of trees that allow forests to have appropriate stocking levels, balanced age classes, and species diversity.

Continued research and development into new and more efficient uses of wood are critical to supporting our rural economies. These include wood bioenergy, biofuels, mass timber, nanocellulose-based products, and bioplastics. The University of Maine is researching many of these innovations thanks to grants from the USDA, DOE, NSF, and more.

As noted, markets play a key role also in keeping forests as forests. Land is a commodity, and low-value land risks being converted to alternative uses. We need to promote markets for all grades of wood and forest uses that will help maintain or increase its value, incentivize management, and reduce deforestation.

Timber harvesting is necessary to meet both societal needs and mitigate climate change. Nearly 20 percent of our forest carbon is in harvested wood products, which can be substituted for emissions-intensive materials like steel and concrete. Incentivizing practices that maintain our increased harvest and carbon will be a win-win for society and the climate.

Wood-based bioenergy is part of the climate solution. Bioenergy markets increase forest value and incentivize removal of wood that otherwise dies and releases carbon. Putting this to use can reduce fossil fuel emissions. A federal renewable energy standard for sustainably harvested biomass would improve low-grade wood markets.

Several federal programs could be utilized to incentivize forest management and enhance carbon sinks. These include the USDA's Natural Resources Conservation Service programs like EQIP and

CSP, and the U.S. Forest Service's Forest Stewardship, Forest Legacy, and Forest Inventory Analysis programs, to name a few. Enhancing these programs can improve forest conditions and wood utilization, thereby increasing both carbon stocks and the flow of timber products.

Additional funding must be devoted to reducing the risk of wildfire and other natural disturbances. Maintaining or increasing federal tax incentives, like the management and reforestation deductions, will incentivize landowners to actively manage their land for timber, carbon, and other co-benefits. We must continue to support research and economic development in the forest products and land management sectors through federal grants from the USDA, DOE, NSF, EDA, and others.

The opportunities and challenges for sustainably managing our forests for timber, carbon, and other ecosystem services are notably complex. Given the recent changes to our forest ecosystems in the wood products sector, there is more need than ever to employ the very best science to inform decision-making. We must continue to research and promote opportunities that simultaneously improve the resilience of our forests and the rural economies and people who depend on this key natural resource.

Thank you again for the opportunity to speak on this topic. I invite you all to visit Maine and see all the great things that are going on at our universities and working forests to implement sustainable forest management and grow our forest economy.

And, Representative Golden, I look forward to seeing you again in December at the Millinocket Marathon.

Thank you.

Chairman GOLDEN. Thank you, Professor Daigneault. Did I get that one better? Getting closer?

So, actually, growing up, I always wondered why my great-grandmother called me "Jerod". And they came down out of like Chicoutimi, to the Lewiston area. But the French-speaking tradition stopped with my mother's generation, at least with me, but it sounded familiar, Lewiston area.

Mr. DAIGNEAULT. Yeah, it is the same for me as well, but——

Chairman GOLDEN. Absolutely. By the way, I am not sure that I have a half marathon in me. That was a brutal race. That was a cold day. And I had a good time, and it was for a great cause. And you want to talk about an old mill town, very, very much related to this.

Mr. DAIGNEAULT. Yeah. And it is an excellent way to—you know, innovative ways that people are trying to, you know, prop up the rural communities.

Chairman GOLDEN. Yeah, that is right. Absolutely. Thanks, Professor.

Next, we will hear from Mr. Thibodeau.

STATEMENT OF MARK THIBODEAU

Mr. THIBODEAU. All right. Good morning, Chairman Jared Golden, Ranking Member Jim Hagedorn, and Members of the Subcommittee. Thank you for the opportunity to appear before you to discuss sustainable forestry's role as a climate solution. I will be

speaking specifically to wood energy as a climate solution this morning.

My name is Mark Thibodeau. I am a lifelong Mainer, and I am a graduate of Maine Maritime Academy with a degree in marine systems engineering. I live in Maine's Second Congressional District, and I serve as regional manager for the energy biomass operations. I have managed five biomass power plants in Maine in the course of my career as well as five in California.

In Maine, ReEnergy operates two biomass power facilities, both in the Second Congressional District. We operate a 39-megawatt facility in Livermore Falls and a 48-megawatt facility in Stratton. We use sustainably harvested forest and mill residue as fuel to generate baseloaded renewable electricity. I like to stress the baseloaded portion of that.

The Stratton facility supplies—also supplies and provides electricity directly to the adjacent lumber mill. Our wood ash from the Stratton facility is also used by more than a hundred Maine farms as a soil amendment for balancing soil pH and enhancing nutrient levels, and has also been approved as an organic fertilizer.

ReEnergy also operates a 60-megawatt biomass power facility in New York, the ReEnergy Black River facility, which is located inside the fence at the U.S. Army installation of Fort Drum. That plant provides all the post's electricity from behind the meter, creating inner security and resiliency.

And, lastly, we operate a 50-megawatt Albany Green Energy facility that is a 50-megawatt biomass heat-and-power facility located in Albany, Georgia. This facility supplies electricity to Georgia Power and steam to Proctor & Gamble and a nearby Marine Corps Logistics Base.

I would like to discuss how biomass energy supports sustainable forestry. Sustainable forestry is an important contributor to mitigating climate change and reducing the risk of wildfire. When forested lands are maintained and harvested in a sustainable way, the forest continues to grow and consume atmospheric carbon.

Wood markets and wood utilization are essential to forest maintenance. Without an outlet for owners to sell their harvested wood, the owners are more likely to sell the land for other uses.

Biomass product is an important component of the larger wood market. After the higher value fiber is sold to make lumber, furniture, or paper, the landowner is left with lower value fiber like tops, the limbs, and thinnings that cannot easily be made into other wood products. When these leftovers or residues are sold to a biomass power facility, the landowner is able to further capitalize on that harvest, and the unusable fibers go toward generating baseloaded renewable energy.

The biomass power facilities are located primarily in rural areas with active forests and/or agricultural economies. In some areas, biomass power facilities are actively involved in the reduction of catastrophic wildfires by repurposing forest debris that is very hazardous during wildfire season.

Our fuel suppliers follow best management practices that ensure sustainable forest management. In all of our communities, forest growth greatly exceeds removals.

What are some of the carbon benefits of biomass? Energy generated from biomass is recognized as having carbon benefits by most scientists as well as many environmental organizations and regulators. This is because the carbon released by biomass power generation is already part of the carbon cycle circulating between the atmosphere and the biosphere. Thus, like other types of renewable energy, including wind, solar, geothermal, and hydro, biomass energy production displaces greenhouse gas emissions that would have been produced had that energy been generated from fossil fuels.

Even though the combustion of biomass generates biogenic emissions of CO2 on a gross basis, when the lifecycle benefits of biomass are calculated, the net emissions for biomass are considered neutral or negligible, depending on the type of biomass. My written testimony provides much more information on the carbon benefits of biomass.

With respect to federal policy issues, we are active Members of the Biomass Power Association, and it often seems to us that biomass power is the least understood renewable energy resource. We have been working for years to urge the Environmental Protection Agency to implement the electricity portion of the renewable fuel standard and activate its biomass pathways, for an example, and to address definitional interpretations of the term "biomass" in the Renewable Fuel Standard.

Without equitable policy support, it can become difficult for biomass to serve as a robust part of the country's renewable energy portfolio. We have been trying to address tax inequities that prioritize the growth of other renewable technologies at the expense of biomass and other baseloads.

Regarding the role of biomass in underserved communities, there are many underserved communities across the country that rely on forestry for income, with biomass being part of their revenue stream. For example, Native Americans are the largest owners of commercial forestry resource in the United States, controlling 16 million acres of forestland. Some of our fuel at our facilities here in Maine comes from Tribal land managed by the Penobscot nation. My written testimony provides additional examples of underserved communities involved in the forestry sector.

So, with that, I appreciate the opportunity to provide testimony today to the Committee, and I thank you for your public service. Please feel free to contact me at anytime with questions or concerns.

And as always, Representative Golden, you are always welcome for a plant tour, as well as any other Members.

Thank you.

Chairman GOLDEN. Thank you. And now we will hear from Mr. Dane.

STATEMENT OF SCOTT DANE

Mr. DANE. Chairman Golden, Ranking Member Hagedorn, and esteemed Committee Members of the Subcommittee on Underserved, Agricultural, and Rural Business Development, I appear before you today on behalf of the American Loggers Council, a nonprofit timber industry trade association representing 30 States, to

address the role that forest industry performs in supporting sustainable forestry and the contribution that healthy managed forests provide in addressing climate issues.

Put simply, loggers ensure healthy forests. As a Minnesota DNR commissioner told a prior governor, Governor, the Minnesota DNR doesn't manage the forests; the loggers do it for us. Public and private land managers cannot accomplish their healthy forest objectives without loggers. Healthy forests depend upon a healthy, stable, sustainable timber industry. You can have both, but you cannot have one, healthy forests, without the other—loggers.

The logging industry represents jobs in rural America. Although the timber resource continues to increase, logging capacity continues to decrease. This is the result of minimal profit margins, high capital investment requirements, forest products, mill closures—or forest product mill closure due to shifting markets, including the COVID pandemic, for traditional forest products such as paper, and workforce development challenges.

For the most part, loggers have not seen much, if any, increase in the delivered price for wood sold to mills in the last 10 years. While they are in the same period, equipment costs have increased 30 percent, insurance premiums have increased 20 percent, and, recently, fuel prices have increased 50 percent. When lumber prices skyrocketed this year, most loggers did not see any benefit, and in some cases actually experienced price cuts.

From a workforce development perspective, the timber industry workforce is aging, with the median age being well over 50 years old. The workforce is predicted to continue to decline by 14 percent over the next 8 years.

Logging is difficult and dangerous work, but those risks should not reflect it in the wages and benefits paid. Logging is not competitive with other comparable industries, and younger workers are not entering the logging industry at the rate that older workers are leaving.

One of the greatest challenges is transportation. There is not enough trucking capacity to meet the demand. Additionally, insurance rates in some regions are $10,000 to $15,000 per truck per year. Trucking is the weak link in the timber industry supply chain.

The American Loggers Council has submitted a briefing paper as part of our full testimony that addresses these challenges, and proposes legislative and policy changes that would provide assistance in resolving some of these issues.

However, this is about more than rural agricultural jobs. Healthy forests are vital to addressing climate change and, particularly, carbon sequestration. Nothing absorbs and stores more carbon than forests. That is why the global Trillion Tree Initiative was joined by the United States in recognition of the carbon sequestration role that trees provide.

We need young, healthy, diverse, and growing forests, not overmature, dead, diseased, and dying trees, and certainly not burning forests. Older forests absorb and sequester two-thirds less carbon than younger forests. If we don't agree upon that, then the timber industry will have limited opportunity to contribute to sustainable forestry as part of carbon sequestration and climate solutions.

Poor forest management does not create healthy forests, but instead negates the potentially positive benefits that would otherwise be achieved from sustainable forestry practices. This is evident in the increase in wildfires in the U.S. and around the world. Global wildfire carbon dioxide emissions are at record highs.

The Copernicus Atmosphere Monitoring Service of the EU found that burning forests released 1.3 gigatons of carbon dioxide last month alone; the highest since the organization began measurements in 2003. The U.S. was a leading contributor. Scientists are concerned that areas with dense vegetation, including many of our national forests, have become the source—are becoming a source rather than a sink of greenhouse gases.

A recent study that the U.S. Forest Service participated in acknowledged that a warming climate has extended the wildfire for obvious reasons. However, the study found that climate change accounts for just 14 percent of the influence of more destructive wildfires, while noting that live fuel was the largest factor accounting for 53 percent.

Last May, I had the opportunity to fly over and survey the aftermath of wildfires in California. A video of the helicopter survey was produced and is included in my full testimony for the Congressional Record. If that video does not initiate an honest, science-based dialogue to develop a new national policy on forest management, wildfire mitigation, timber salvage, and restoration, nothing will.

Sustainable forestry practiced and performed by the American timber and forest products industry is part of a solution in meeting the objectives of climate initiatives. However, it is entirely dependent on the rural jobs that the timber and forest products industries provide. The timber industry, healthy forests, and rural jobs are the climate solution.

Thank you. I look forward to answering your questions.

Chairman GOLDEN. Thank you all very much for your opening statements here.

We are going to get to the Q&A portion now, and I will go ahead and kick things off with my 5 minutes.

I think both Mr. Dane and Doran talked a little bit about some of the pandemic-driven related struggles of the logging industry over the last year. And as you both know, no doubt the Maine delegation in particular, although we have certainly had allies here in Congress, to get additional support for loggers and logging truck drivers that have been struggling through the COVID-19 pandemic.

Could you talk a little bit about how the COVID-19 pandemic impacted the timber industry and why relief was needed for these small businesses at the same time that consumers were seeing higher lumber prices? In addition, can you talk about the success to date of the program? I know they haven't closed out the applications, but what do you expect in regards to the overall success of the program? And what are you concerned about as you look forward over the next year?

And I think we can start with Mr. Doran. Mr. Dane, if we have some time, you can comment.

Mr. DORAN. Sure. I would be happy to. Thank you, Chairman Golden, Jared. And I do have photos of you. If you would like me

to screen-share, I would be happy to put them up so there is actual proof of your work in the woods. I will look for your discretion on that.

So in terms of your question, you know, starting with the pandemic and the impact. So in 2020, you know, we saw, basically, the pandemic start before it even came to the United States. As a result of the pandemic and its impact upon China and the Far East, we started to see markets start to close or be reduced as far back as January of 2020, and it just dissipated from there, between pulp and paper impacts, saw log products, obviously, disruption of demand paper products, whether it is in office buildings or restaurants, et cetera. In 2020, our Members saw a drop of between 30 and 50 percent, and that has just compounded over the last 18 months.

You alluded to what has happened with saw log markets. All of you read the headlines of sky-high lumber prices. I can tell you firsthand that here in the state, it wasn't a supply and demand issue. The log yards were full, and so there was a very high supply from the contractors that provide those solid log products to manufacturers. And then, obviously, demand was sky high. So it was not a simple supply and demand issue. Money literally just did not trickle down to the supply chain.

So we have been hit by a double whammy, so to speak. We are very, very thankful for the work of our Maine delegation, especially Jared Golden and Senator Susan Collins, and the rest of our delegation, for providing the pandemic assistance for timber harvest, as in haulers, that was included in the omnibus appropriations bill that passed Congress back in December of 2020, and finally hit the street by USDA in late July of this year.

Maine has taken the lead with respect to applications in that program. We are nearing nearly 300 applications. So we are pleased to see that folks are taking advantage of it. We don't know yet, you know, how much they have applied for and how much of the $200 million is actually going to get to them.

I will say this, the agricultural community and fishing community has seen nearly $30 billion of aid. The logging community, which has never had a handout or a hand up, so to speak, by the federal government is only going to get about $200 million nationwide. It is a pittance.

You know, again, we are not looking for the federal government to bail out every contractor, but this funding is certainly going to help. But, you can tell by the impacts that I am giving you that it is not going to do a tremendous amount, but it is going to help those in need to get to the other side of this.

So I will allow Mr. Dane to reflect nationally, but those are the impacts here in the State.

Mr. DANE. Thank you, Chairman. Real quick, yeah, the—from my estimation to this point, the funding eligibility across our nation will exceed the $200 million appropriation, which is a testimony to the need for the funding that was out there and everything else.

How did the pandemic impact the industry directly? Interestingly enough, Congressman Stauber's district had a mill announce a closure about 15 months ago directly related to the impacts of the

drop and demand for paper products in the offices and schools and that type of thing and permanently closed that mill, as well as another mill in Wisconsin that permanently closed, that accounted for 20 percent of the timber consumption in Wisconsin alone. So it had direct and indirect impacts. The assistance has proven helpful.

Chairman GOLDEN. Well, I am out of time, but I am going to just take a little bit of privilege. Any estimate at all on what the actual eligibility demand would look like if every logging contractor that needed help ended up getting some?

Mr. DANE. Chairman Golden, yes, the U.S. Forest Service conducted a study of the financial impacts as a result of the pandemic and estimated just slightly over $1 billion. The American Loggers Council did a survey with a consultant that estimated a $1.8 billion negative impact directly resulting from the pandemic. So, yeah, those are a couple of estimates of the entire fiscal financial impact.

Chairman GOLDEN. Thank you. I will certainly have another round of questions later.

Mr. Hagedorn, you are recognized.

Mr. HAGEDORN. Thank you, Mr. Chairman.

Mr. Dane, we will kind of stay with you. So listening to your testimony, it is clear that, as Congressman Stauber brought up, this forest management is very important. If we don't manage the forests properly, we are in big trouble on a number of fronts. And it seems interesting to me that a lot of times you get into States like California where they have a lot of fires and it doesn't seem to be that the forests are managed properly, and a lot of that is extreme environmentalists getting involved, either at the political level or at the grassroots level, and preventing people from going in there and basically cultivating the forest.

I represent a farm area. I grew up on a farm. And, you know, forest products is just another crop. So I would have it over at the Agriculture Department and everything else.

So it is kind of interesting that they don't let you go in and do what you need to do in order to protect the forests. And then when they burn down, they say, look at it, it is all climate change. But then according to your statistics, no, it is not. It is about 8 to 1 or 7 to 1, not doing proper management.

So getting into it, though, you have lots of things going on that are cutting into your bottom line, driving up your costs; obviously, inflation, things of that nature, policies, and just bad government policies. I think there are some bad government policies on the horizon that might hurt your small businesses. We are looking at the majority party raising taxes again that may be making it more difficult for businesses to expense their items in current years and things of that nature.

The tax reform bill that was passed under President Trump, I think, helped most of your Members. Would you not agree with that?

Mr. DANE. Mr. Hagedorn, absolutely, I would agree with that. As Congressman Stauber mentioned, the margins are typically 1 to 3 percent. Any increase in taxes on this capital-intensive industry would cut into that. As marginal as it is, that in the industry cannot afford to absorb additional increases in expenses.

Mr. HAGEDORN. You don't know of any Members that are asking for their taxes to be increased at this point, right?

Mr. DANE. No, sir.

Mr. HAGEDORN. Secondly, let's look at these big government items. You know, regulations at the federal level can affect you. Energy costs, you brought that up. And, you know, what is going on in the climate change arena, those things are going to drive up the cost of energy, make our energy less reliable. That can't help your bottom line.

And then you get into some of these EPA requirements on your heavy equipment and trucks. And I think it was brought up by testimony in one of the others where you go from tier 3 to tier 4, and the difference might be this much, just this much more in trying to clean up the environment, but the cost is enormous to industries and driving up consumer costs.

Can you address that a little bit?

Mr. DANE. Well, my counterpart, Mr. Doran, did reference that, and he is correct. The cost of going to tier 4 has had a lot of unintended consequences, negative consequences, first and foremost, by adding tens of thousands of dollars to the prices of a truck alone or equipment, so that is a problem. Dealing with the servicing on those systems that tier 4 requires, it brings out service technicians out that are driving more out to the equipment.

So I think when you are taking all the indirect impacts, it would be marginal, at best, that there would be any environmental improvements associated with the tier 4 equipment.

Mr. HAGEDORN. And then you brought up a point about how important the trucking industry is to your industry or combined in many ways, and now you don't—you have a shortage of drivers, not enough trucks on the road at a time. My understanding is, at any one time in the United States, each day there might be a thousand big trucks on the side of the road because of these tier 4 requirements, and they just shut down and you have to get technicians out. There are no technicians, you know. A lot of these places are offering up $10,000 bonuses for technicians to start.

One of the pieces of legislation that I have is the American Workforce Empowerment Act that says that if families have saved for college education for their kids, that they should be able to use that money, not just for 4-year college, but for technical school, certificate programs, the training for these types of things, you know. People are going to do the diagnostics on the truck and then the purchase of tools and equipment.

Do you think that would be the type of legislation, anything to get more people in the trades and more people into the dirty jobs, as I think Mike Rowe refers to them?

Mr. DANE. Mr. Hagedorn, absolutely, that is one of our biggest challenges. We are having a conference in Coeur d'Alene, Idaho, next week. One of the seminars is on workforce development. And my counterpart in Maine will be speaking on that, Mr. Doran. They developed a great program in Maine to enter the pipeline for workers in the timber industry.

Mr. HAGEDORN. If we do have a second round, maybe we can talk with him a little bit more about that. Thank you.

I yield back.

Chairman GOLDEN. Next up, we will recognize Rep. Troy Carter from Louisiana.

Mr. CARTER. Mr. Chairman, thank you very much.

My question is for Dr. Daigneault. I am interested to hear more about the climate solutions that forest provides. Forests provide important ecosystems services such as sequestering carbon. Forests products, by their very nature, are comprised of carbon and durable wood products, storing carbon for years.

As you know, the sustainability is an issue that is very important to me. I would love to hear your thoughts on what can be done and what else is happening in the area of bolstering climate solutions through our forestry.

Mr. DAIGNEAULT. Yes. Thank you, Representative Carter. So some sort of big solutions that are often referred to when you think about utilizing forests are sort of three-tiered. So one is keeping forests as forests, so effort that we can put into conserve forests but not necessarily in a pure preservation perspective, but to ensure that it is not converted to alternative uses such as, you know, strip malls and things like that.

Another one is to basically improve the forest management on forests that are already out there. So what can we do—and a lot of the things that we have discussed today is what can we do to incentivize landowners to get into the woods more, better treat the land that they have, and implement different practices to get what we call ideal stocking levels so that trees basically have space and resources to grow.

And the third one is to basically take sort of marginal land that might be not best utilized and figure out how to reforest that area, to essentially expand the footprint that we can.

All three of those are proving to be very cost effective if you sort of compare the level of sort of incentive that you might have to provide to a landowner relative to, you know, electrifying our transportation system or putting in solar panels or something like that.

The key also is the healthier that we can get our forests by going in and managing and sort of freeing up space and allowing trees to grow faster, taller, wider, is that that will allow us also to basically utilize a higher proportion of the wood into what you noted as sort of durable wood products, right. And so the longer—the more—so the faster we can get trees to grow larger, taller, straighter, healthier, the more that we can basically convert that into 2 by 4s, furniture, other things that could be basically storing that carbon for decades, even when it is removed from the stump, thereby also allowing sort of the opportunity for the next generation of forests to sort of grow in its place and continue to sequester more carbon.

Mr. CARTER. Let me just do a followup, Doc. My time is going to run out. But I just want to ask one follow-up question that—how do working forests differ from forests under conservation, and do they play different roles in terms of sustainability and climate solutions? What is the difference between the two and the roles they play?

Mr. DAIGNEAULT. Sure. So in a place like Maine, Maine, about 20 percent of forests are actually under some sort of condition of what we would consider conservation. But in Maine, 85 percent of

that forest that is under conservation is actually also designated as what we would call working forests. So they might be owned by conservation groups or they might be actually, you know, owned by family forest companies that basically want to have their land conserved in the sense that they don't want it to be converted to alternative uses, but they still want to manage that land for timber products, wildlife habitat, clean air, clean water. And so they might take a slightly different perspective than say, you know, a pure commercial landowner to some degree, but they are still managing for multiple uses of which timber is a strong part of it.

So we really have to be careful when we say "conservation" and not align that purely with preservation or not basically doing any sort of management or harvesting from that land. A lot of conserved forest is still what we would consider working forest.

Mr. CARTER. And is there competition between the two? Is there a conflict there?

Mr. DAIGNEAULT. Not necessarily. There might be that the landowners that have their land under conservation might have different objectives than what you might want to think of as a sort of pure commercial landowner or forestry company, but everyone tends to acknowledge that harvesting is part of the solution, right. But it is just part of one of many sort of suite of services that we can get from how we manage our land.

The key is that we have to think about this from very much a landscape perspective and sort of commercial landowners, small family landowners, conservation landowners, they all can sort of work together to help get—sort of meet society's needs at large.

Mr. CARTWRIGHT. Okay. I see my time is up. I yield. Thank you very much.

Chairman GOLDEN. We will now recognize Representative Roger Williams from Texas 25.

Mr. WILLIAMS. Thank you, Mr. Chairman. I want to thank the witnesses for coming here today.

And my first question is for Mr. Dane. As you know, forestry-related small businesses are crucial to providing jobs and revenue to our communities, and we have talked a lot about that today. When I talk to loggers and lumbermen back in Texas, I constantly hear concerns surrounding the labor shortage.

Recently, I met with a second-generation, family-owned small business in your industry from my district who told me that they are struggling to keep up with current demand because of many of their workers have decided not to return to work and the X generations are joining in the forestry, and they are not doing that. So the federal government should be encouraging individuals to get back to the workforce rather than incentivizing them not to work and stay at home.

So, Mr. Dane, can you speak more on how the labor shortage is affecting the small businesses that your organization represents? And, secondly, is there a specific policy that made the labor shortage worse in the last year and a half?

Mr. DANE. Mr. Williams, thank you very much for the question. And I was just down in Texas a couple of months ago visiting with your timber industry down there. It is a great organization.

Mr. WILLIAMS. It is a great State too, isn't it?

Mr. DANE. Absolutely, sir. I have got a survey here that the American Loggers Council did in 2019, actually, before the pandemic, which references that 97 percent of those surveyed said it is virtually impossible to replace or add new hires to their operations. That is an ongoing problem that we have.

Now, with the added—I will be honest with you. With the added unemployment benefits, I was talking to a logger in International Falls, Minnesota, that said he is going to have to give his guys a raise to offset the additional unemployment that they are receiving to entice them to come back to work. So it is a problem.

Mr. WILLIAMS. Competition and access to capital play a fundamental role in our economy, and the government must not impede entrepreneurship and innovation but, rather, ensure that American small businesses can succeed and grow without unnecessary government interference, and you just touched on that. Paying people not to work is too much of an interference.

Burdensome regulations have real impacts on small business owners and the communities who depend on them. I am a small business owner, have been for over 50 years, and I know how excessive regulations can hinder growth and competition. We work—I am in the car business. We work on the same margins you do, so any movement one way or the other is tough on the industry. And we do not need a top-down, one-size-fits-all approach, but, rather, a properly regulated economy that creates opportunity for everybody.

So, again, is the logging industry properly regulated, do you think, and do you have concerns that the new focus on the green policy regulations will be harmful to the competitiveness and profitability of your Members?

Mr. DANE. From a regulatory perspective, I am happy to say that at local, State, county levels, the regulation is not really excessive. But when you get to the federal level, it is extremely burdensome. The NEPA requirements and the ESA requirements have been weaponized by those that want to just stall and litigate national forest management plans.

Mr. WILLIAMS. So you have all the regulations you need to deal with right now, don't you?

Mr. DANE. We do not need any further regulations, Mr. Williams.

Mr. WILLIAMS. All right. Thank you.

Small businesses are finally beginning to recover from COVID-19 pandemic, and the last thing they need is for Congress and President Biden to raise taxes. We have talked about that. Raising taxes in this time is crazy, and the infrastructure bills that Democrats are pushing forward and attempting to pass this week will raise the corporate tax rate and drive up inflation, making goods and services more expensive. That is the bottom line.

Despite the White House claim that this will cost nothing, which is a complete lie in my mind, the cost will inevitably be passed on to individuals or businesses, and many businesses can't pass it on to individuals, so they have to eat it, and they have to let people off to pay for it. So increasing taxes will cause businesses to hire less people and invest less back in the economy.

So, Mr. Dane, quickly, can you discuss how tax increases would impact the small businesses that you represent? And if taxes are increased and your margins remain the same, which probably would not be, would that mean passing the cost on to the consumer?

Mr. DANE. Well, I would like to answer the last part of that question first. Loggers do not have the ability to pass on that cost to consumers. Loggers are paid based on what the mills determine, and as Mr. Doran referenced, dictate will be paid. And so it is one of the only industries in the country that I am aware of that you don't have the opportunity to tell your consumer what you are going to sell them the product for. They tell you what they are going to buy it for. So they don't have that opportunity.

Second, these are small businesses, and some are corporations, so that increased corporate rate would directly impact these family businesses.

Mr. WILLIAMS. Thank you. Stay the course. There is help coming.

I yield my time back.

Chairman GOLDEN. Thank you.

I will now recognize Rep. Pete Stauber from Minnesota 8.

Mr. STAUBER. Thank you very much, Mr. Dane, for appearing here. I am going to put you on the spot. My good friend from Texas just says Texas is a great State. Texas or Minnesota?

Mr. DANE. Minnesota in the summertime.

Mr. STAUBER. Thank you. Thank you so much for being here.

You know, we talked about the loggers and our truckers at the forefront of responsible management. You know, how is the skyrocketing cost of fuels for transportation and energy affect a small logging and trucking businesses?

And I will just share with you. I was at a logging site just west of Grand Rapids, you know, Rajala Timber, and they talked about the cost for fuel and energy to run the machines. How has that affected—how is it affecting the industry and the ability to move forward?

Mr. DANE. I will give you a quick example, Congressman Stauber. You know, Scheff Logging in Marcell, Minnesota, I think their fuel expenses are about a million dollars a year, maybe 1.2, 1.3. You add 50 percent—yeah, 50 percent increase in fuel cost right there, you are talking a half a million dollars for one company alone. So it definitely is a burden to the industry and one that is unfortunate that has occurred in the last 8 months.

Mr. STAUBER. You know, also in your testimony, Scott, you discussed the Trillion Trees Initiative, which is embodied in a bill introduced by my colleague, Representative Westerman. How do the reforms in that bill, such as streamlining NEPA, make it easier for your industry to do its job and, in turn, support forest health and carbon sequestration?

Mr. DANE. Well, let's go back to the Trillion Tree Initiative, which is a global initiative to plant a trillion trees around the world to, you know, absorb more carbon. It makes a lot of sense. When it comes to the NEPA reforms that are necessary—that are critically necessary, that are hampering forest management at the federal level, I was at a meeting, and I think they were talking

about at one time a NEPA report was about 75 pages long. Now it is 600, 700 pages long.

I was out there in California. We took a helicopter tour of the aftermath of the wildfires in May. We were up there for 6 hours. We toured 3 million acres of burned land—3 million acres of burned land. And when you look down and you see what is going on in privately owned and managed land, they are salvaging the timber, they are restoring the land, they are replanting on there. If you look at the adjacent federally managed timber, nothing is happening. No salvage is going on. No reclamation is going on. And that is all because of all the NEPA requirements that just are used to hamper forest management.

Mr. STAUBER. Mr. Dane, if you had one request from the EPA for your industry, maybe two requests, what would they be? How can the EPA help your industry with decisions?

Mr. DANE. Congressman Stauber, thank you for asking. I think that would probably be a question that the Chairman would also like to hear. And I know Dana Doran and myself have been working for 3 years, at least, with the EPA on the biofuels and the renewable fuel standard and feedstock eligibility.

The EPA has misinterpreted the RFS. Their interpretation is contrary to all other public and private timber management organizations, and that is impeding the development of renewable fuels from forest-based feedstock. They need to accept those pathways that were talked about for feedstock to be eligible for RFS and RIN credits, and we have got hundreds of millions of dollars prepared to be invested in this new technology which, again, goes back to renewable fuels but forest-based.

If we could overcome that, there would be a new plant built in Minnesota, your district. There would be a new plant built in Maine, and there is a plant being built right now in Oregon. It is a $330 million plant that would also benefit from the EPA acknowledging that their interpretation of eligible feedstock is incorrect.

Mr. STAUBER. Well, thank you. In light of my short amount of time, I do know that Chair Golden and Ranking Member Hagedorn and I, we have all discussed that, and it is a priority, I know, for the Chair and Ranking Member, and I stand with them in helping with the solution.

Scott Dane, thanks for your expert testimony. On behalf of all Minnesotans, and in particular northern Minnesota, thanks for your prior work with the ACLT. Tremendous. And your knowledge is really appreciated on this Committee. Thank you very much.

Chairman GOLDEN. Thanks for highlighting that. That was a really important exchange right there.

I am going to move into a second round.

I am going to start with Professor Daigneault. There has been some talk and focus on carbon markets as a way for small family forest owners to generate additional income out of their land. Do you believe that this is currently viable for small family forest owners? Do these carbon markets help to support forest ecosystems? Can they be a part of advancing climate mitigation solutions, but just as importantly, will they help or hurt forest products economies? And is the answer dependent on how the policy is structured or not?

Mr. DAIGNEAULT. Right. Thank you, Representative Golden. Lots there to unpack.

Thinking of just markets at large, right, carbon markets, they are part of the solution, but it might not be part of the solution for everybody. It does—it will provide sort of a diversified income stream to ideally promote more forest management, but the policies themselves has to be structured in a way that does that.

A lot of sort of existing carbon markets that focus on forest carbon tend to penalize those who are understocked but have the potential to grow and basically reward a lot of those that are overstocked in the sense that they have a lot of carbon on the ground compared to maybe the average forest.

The other thing that it does is it tends to—it is getting involved, particularly in carbon markets, is very time consuming, resource intensive, requires third-party audits and things like that that can make it really cost prohibitive for particularly the sort of small and family forest landowners. There are some organizations, like American Forest Foundation and Nature Conservancy, are working to develop programs that specifically target those that own, you know, less than a thousand acres, but they are still pretty nascent from that perspective.

So, again, I think there are opportunities there, but I don't think it is the full solution. I think just, you know, saying that if we create a bunch of carbon markets and create some ways that people can buy, sell, and trade offsets are going to necessarily open up, you know, the forest to all these—to all this sort of management innovation, I think it is part of the solution. But I still think there are other aspects that we need to take in account, particularly that—you know, the duration that people have to enter into these markets, the sort of complexity of how some of these things work can make it more prohibitive than maybe, you know, what someone like myself teaches in theory in an economics course.

Chairman GOLDEN. An excellent point. I appreciate that. And I know someone sitting next to me said we could have a whole hearing about that subject.

But I wanted to ask, then, from the perspective of going from the classroom to on the street, Dana, maybe you could talk a little. I mean, I have seen that some of these programs are structured in ways that would probably be of concern to loggers and the Forest Products Council, but is there also, you know, something good here potentially if it means that more people are going to engage in forest growth? And does it give landowners another tool in the toolbox? What is your feedback on this?

Mr. DORAN. You know, thanks for the question, Jared. And I have got a picture behind me of you operating a stroke delimber, by the way, and that is you also on the skidder. So I just wanted to make sure folks knew that was there and you actually did it.

In terms of carbon markets, you know, I think carbon markets scare loggers quite a bit, because, you know, carbon markets generally are a reduction of the annual timber harvest or the annual cut, but we feel like it can be structured in a way that we make sure that we actually weed the forest, remove the low-value wood, and we can still conduct the same type of forest management without an impact to the contractor. But that is something that has to

be mandated up front, and it really truly is a partnership between the landowner and the carbon market and even the logging contractor.

As I mentioned in my testimony, you know, we created a third-party certification program for logging contractors 20 years ago called the Master Logger Program. And the Master Logger Program is a third-party audit of the harvest. Professor Daigneault mentioned, the cost to the landowner, but there has to be a third-party audit to provide assurances and verification of the work one on the ground. I think, you know, we provide a pathway to try to mitigate that cost. And also, so you achieve the landowner point of view, you achieve the market capability, keep their land forested, because they are receiving a revenue forecast, and keep the contractor as part of that with the work that they are doing on the ground.

So I think there is a path forward, but you have got to make sure that you have markets for low-value wood, whether that is biomass, or it is finding other markets for low-value wood. And then the contractors are part of that. And if we can develop a system like that that increases forest management, produces higher level products, greater markets, I think everybody shares in the prosperity. But that—that is a big nut that we have to crack.

Chairman GOLDEN. Thank you both.

Do you have any follow-up questions?

Mr. HAGEDORN. I will just ask one, if that is okay.

So, Mr. Doran and Mr. Dane, I will kind of throw this out at you. Just so people understand a little bit better, I mean, we all experience one way or another these incredible increases in lumber costs. I mean, people had their houses go up $40,000 to build, and people put off projects and everything else. But you say your industry doesn't really benefit from that.

Can you explain to folks how it works and why that didn't trickle down to you?

And I am just kind of curious. I mean, again, the farming and ag-based folks that I work with have to deal with meat packers, for instance, the livestock people. And they sometimes think that the meat packers are making a lot of money at the grocery stores and everything else selling their meat, but the farmer—it doesn't always get to the actual livestock farmer. Maybe that is similar here. So I would be interested in your response.

Mr. DANE. Mr. Hagedorn, real quick. In my opinion, it was, for lack of a better word, gouging that was occurring within the markets because of demand. At the same time, there is an increase in forested land because the CRP maturing and that type of thing, so the supply was abundant. There was an increase in logging capacity with mills shutting down and stuff, so that infrastructure was also abundant. So the mills could afford to dictate, again, the price.

I talked to a logger in Grand Rapids, Minnesota, the other day, and he said that the mill told him, we are not cutting your price; we are just paying you less. So it is a mill-controlled market right there, and that is one of the reasons that the trickle down has not occurred.

But I think my counterpart, Mr. Doran, would also have good information to share.

Mr. DORAN. Yeah. Thank you, Mr. Hagedorn. I appreciate the question, and Scott is spot on. You know, it is interesting, in the spring of this year, so let's say January to April, there were tremendous amount of reports nationally, the Wall Street Journal and New York Times, on the cost of lumber and kind of the breakdown of who was making the money. And I will tell you, the logging contractors, and the landowners for that matter, were not seeing any of the benefits. You know, we would communicate obviously with our Membership, but we are also talking to the landowner community, and there were a lot of folks who would talk to a logging contractor and say, oh, you must be getting rich right now; you have got to be able to pass that along. And they are just honestly saying, no, we are not, we are not getting any of this, and neither are you, and that was the bottom line.

And it is interesting, we issued an opinion piece in one of our statewide newspapers back in April of this year, basically calling into question what was happening both here in the state but also nationally as to where the money was going. And, you know, I am not going to point the finger at one piece of this. There are a lot of players that are involved, you know, from the mills to the retailers to the wood brokers in between. I will tell you, there are also large cooperatives who buy materials on behalf of retailers. They are all involved.

And so anywhere from retail to manufacturers, that is where the money was, and it wasn't just one piece of that that was making the money. But I will tell you, none of it was trickling down.

But after we issued that opinion piece, we saw an increase in pricing that was paid to the contractors and to the landowners. So it is funny what happens sometimes when you get punched in the eye. There is a noticeable change that took place. Obviously, this summer, the commodity markets have changed. Lumber prices have come down in many respects. There has been, you know, a change in pricing. But a lot of the public attention has, I think, influenced where money has trickled and what has happened to overall pricing.

But Mr. Dane is absolutely correct. There was gouging at a high level between those areas that I identified for you.

Mr. HAGEDORN. Okay. Well, I appreciate that. It just seems like you are in a little bit of a precarious spot. You can't control your destiny in many ways. But the one thing that can always help you is to make sure that we have downward pressure on cost of production, to make sure that you can meet your bottom line, that whether—whatever money you are going to get from the mills, you can try to keep the cost of production low.

And I will just come back to it. It is these big things that sometimes government can really screw up and hurt you on—taxes, regulations, energy, trade, and equipment, in this case, with the way the EPA jacked up the prices and made the equipment less reliable. In all those instances, government has an opportunity to improve your bottom line or government has an opportunity to move you towards being out of business. And I want you to know, I am on the side of trying to help you build your bottom line, so we are going to stand for those policies. Thanks for your testimony.

Chairman GOLDEN. Speaking of regulations, I think Mr. Stauber has a question.

Mr. STAUBER. Thank you, Chair Golden.

I just have one additional question for Mr. Dane. You know, there is a lot of talk about adding endangered species to the list of endangered wildlife, et cetera. What does that do? You know, how does that affect your industry?

I know in Congressman Golden's area, you know, the lobsters are having—they are having major issues, and I know in some parts of even Minnesota. What does that—what is the economic impact even prior to something being listed? What is the economic impact, and how does your industry look at that?

Mr. DANE. Congressman Stauber, thank you very much. It is ironic that we think about this issue from a Minnesota perspective, and it is just one more tool that is going to be part of the arsenal to allow those who want to litigate forest management to death to utilize. And here is an example of it.

The Canadian lynx is—kind of goes back and forth. Is it going to be in danger, is it not going to be endangered or threatened or whatever else it is. So they track Canadian lynx. First of all, that is just in Canada. They are not coming to Minnesota to mess up our timberlands. No, just kidding there. But they tracked them. And you know what they found out? The Canadian lynx traveled on logging roads. They are not stupid. You know, they are not going to go through the brush and everything else. They are going to travel on logging roads.

So logging roads are not counterproductive to the Canadian lynx habitat at all. But, again, once you get something on that list, you can use it as a tool to interfere with forest management.

Mr. STAUBER. Yeah. That is what we have heard, I have heard back home as well. And I think it is nationwide. And I think we have to really take a healthy look at that and what we need to do to really, I guess, stop the weaponization of the courts and allow your industry to do what you do well: manage forests, bring great jobs. You know as well as I do, in Minnesota, it is like a $10 billion industry statewide. It is huge. And so we stand ready to help, as Congressman Hagedorn stated, not only in Minnesota and Maine but across this great nation.

So, with that, I will yield back, Mr. Chair.

Chairman GOLDEN. Thank you. Good question. The lobster industry has taken a big hit, and weaponization of the courts is, I think, the perfect way to put it. That is a whole other topic right there but one we are in the thick of in Maine.

I wanted to ask Mr. Thibodeau. I am sure you are aware that there is a perception out there that burning wood for energy isn't the best use of forests and trees, particularly when it comes to carbon sequestration and climate solutions. I wanted to give you the opportunity to talk about how ReEnergy uses fuel and where it comes from and how using that wood for energy generation helps ensure the continued health of forest land.

Mr. THIBODEAU. Thank you. Thank you, Mr. Golden. Yeah, forest and mill residue that we use for generating renewable electricity at our facilities come from logging operations in mills near

our power plants. The vast majority of that comes from within about a 75-mile radius.

When forests and land are maintained and harvested in a sustainable way, the forest continues to grow, and it grows healthier. It continues to consume atmospheric carbons. So wood markets and wood utilization are essential to forest maintenance. Without an outlet for owners to sell their harvested wood, the owners are more likely to sell their land for other uses.

If you think of the biomass energy industry as taking the leftovers or the mill residues from forest operations, the low-value, low-grade products are critical, as many of our other witnesses have testified today, to promoting forest health. For example, creation of jobs from biomass industry as well as the economic output of our facilities. We recently had an economist study our two facilities in Maine, and they supported more than 360 jobs and had an economic output of $95 million per year, on an annual basis. The Stratton facility alone, where I am located, purchased fuel from more than 58 Maine-based logging and trucking companies and more than 19 different mills in the State of Maine. So that is supporting that low-value market.

So there is a perception out there that burning wood is not the best use of forests and trees, and I would agree with that. When you think about the higher value markets for lumber mills, furniture makers, paper, I would agree with that. However, you have to make sure there is a clear line there that we are not cutting down forests to make power. We are taking the leftovers, the residuals that are left behind and from mill residues. In order to make a 2 by 4, you have to debark that tree. That bark will come to a biomass energy facility such as ours for power production.

Again, stressing baseload renewable power, biomass is one of the only, along with geothermal, that is considered baseload renewable power, which means, you know, we are producing power 24/7, no matter how hot or cold it is, if it rains, if it is windy or not, or if the sun is shining.

So thank you, Chairman Golden. Hopefully, that answered your question.

Chairman GOLDEN. Yeah, of course. I am assuming, by the way, you don't have to go too far into it if you agree, that you are in agreement with Mr. Dane about the importance of the RFS for biomass.

Mr. THIBODEAU. Yeah, absolutely. I would echo Mr. Dane's sentiments exactly. The RFS is something that we have been working with very closely through the Biomass Power Association and trying to activate those biomass pathways, kind of how I had mentioned in my testimony. It is really critical from a federal policy issue for the biomass industry and to address the interpretation of the term "biomass" as well.

You know, infrastructure that supports, you know, such things as use of electric vehicles is very important to climate change. And in terms of development and continued operation of renewable energy projects such as ours, that renewable fuel standard is really critical. It will strengthen our potential role in the renewable fuel standard. So we hope and expect the biomass electricity pathway will become operational.

Chairman GOLDEN. I know in Maine, we are really looking at policies that could turn our State into a bit of an energy island where we really can be producing, you know, and self-sufficient on our own energy production, and biomass is certainly a part of that. And we see it also helping small-scale manufacturers when they are able to, you know, generate onsite, which has occurred in a few places, but there are some tweaks that need to be made, I think, to increase that. Dana and I always agree: We shouldn't build a public school in Maine that doesn't have also some kind of biomass boiler or something built into it. It is public expenditures. But all of that depends also upon the future of having this forest resource and making sure that it stays healthy.

So I guess my question is just to the professor. What types of policies are you looking at, either private or public, looking into the future to make sure that we have a healthy forest? I mean, do you think we are going to need to introduce new forest species or is it sustainable the way it is? I mean, what is your recommendation for the forest products industry in Maine?

Mr. DAIGNEAULT. Yeah. So great question, Congressman. So one thing to think about is that I think we have to acknowledge that climate change is inevitable, right. We are already experiencing that, as Mr. Doran said, you know, how we have to harvest and what species we are seeing. It is changing, right. And so we have to do more to basically get that information out and help those on the ground who are managing, logging, et cetera, handle that and adapt accordingly.

In addition, you know, with that, we do need to acknowledge that some species are going to grow faster than others, but at the same time, you know, those aren't necessarily basically the most desired species, per se. Coupled with that, you know, as we noted, we talked a little bit about carbon markets, but I think, again, we need to come up with ways to basically get people in the woods and managing from a whole suite of different opportunities. So that is more incentives to do management, more—you know, more through the USDA's NRCS and other things that at least are facilitating more management, more removal.

That goes—couples with what Mr. Thibodeau was saying where we do need to basically have sort of robust markets for biomass, which is going to help basically get some of that lower grade wood out there, which is then going to increase and enhance the resiliency and health of our forests of what remains.

In addition, I have noted that, you know, what everyone has talked about today is that we need to continue to find ways that make it, again, profitable to want to do things in the woods, right, and actively manage. And so I have noted at least that some of the sort of federal tax incentives that have been out there, at one point a couple years ago, they were considering dropping them. I think keeping those were a huge boost or a very important aspect for, not just the sort of logging and forestry community, but for climate change at large.

And, lastly, I think we just—we also need to acknowledge that the economy is changing, people's needs are changing, and their uses of wood products are changing. So by continuing to explore other ways that we can use wood as substitutes for fossil-based

products, you know, things that, you know, are more durable and sort of meet the needs, you know, the consumption needs, that is going to help put more value on the forest and in the woods that we rely on, which is then going to help boost a lot of these communities that, you know, have a long heritage and history of relying on our forest resources, you know, to make those communities thrive.

We need to continue to push in that way and probably acknowledge that maybe, you know, pulp and paper is not going to be the solution for the next hundred years, but we still have an abundant wood basket that can provide a lot of resources that we can take advantage of.

Chairman GOLDEN. Thank you.

I think that is as good a place as any to wrap things up right there.

I want to thank all the witnesses on the panel for joining us today, and I want to thank all my colleagues for joining us and for their good questions.

From the testimony and the exchange sought here, I think it is clear the great benefits of the forest products industry and sustainable forestry can have for the country. And we all have a role to play in contributing to a healthy forest, to mitigating climate change, and to taking care of our local economies, making sure they can be successful. So I believe it is our responsibility to support industries like those that we have in our forested States and communities.

Protecting our environment doesn't have to be bad for business, and I think our witnesses proved today that that is certainly not the case in places like Maine and Minnesota and a lot of others. I know down south as well. Sustainable forestry provides positive economic and social outcomes and meets the needs of the present and we hope future generations as well.

So I look forward to working with my colleagues to advance policies to keep our forests healthy and continue to help small business owners and the forest products industry.

So I would ask unanimous consent that Members have 5 legislative days to submit statements and supporting materials for the record.

Without objection, so ordered.

And if there is no further business before the Committee, we are adjourned. Thank you all very much.

[Whereupon, at 11:40 a.m., the Subcommittee was adjourned.]

APPENDIX

Testimony of

DANA A. DORAN
Executive Director
Professional Logging Contractors of Maine

Before the Committee on Small Business, Subcommittee on Underserved, Agricultural, and Rural Development regarding Sustainable Forestry's Role in Climate Solutions

Wednesday, September 29, 2021

Chairman Golden, Ranking Member Hagedorn and members of the Committee on Small Business, Subcommittee on Underserved, Agricultural, and Rural Development, my name is Dana Doran, and I am the Executive Director of the Professional Logging Contractors of Maine (PLC). The PLC is the voice of independent logging and associated trucking contractors throughout the state of Maine. The PLC was formed in 1995 to provide contractors with a voice in a rapidly changing forest industry.

As of 2017, logging and trucking contractors in Maine employed over 3,900 people directly and were indirectly responsible for the creation of an additional 5,400 jobs. This employment and the investments that contractors make contribute more than $620 million to the state's economy. Our membership, which includes 210 contractor members and an additional 100 associate members, employs 2,500 individuals who work in this industry and is also responsible for 80% of Maine's annual timber harvest.

Thank you for providing me the opportunity to testify on behalf of our membership and the state of Maine regarding sustainable forestry's role in climate solutions. Thanks, as well for recognizing the work of our national partner, the American Loggers Council, to discuss the role that timber harvesting companies play nationally. Whether it's in Maine or across the United States, the timber harvesting community is a vital part of the responsible management of our nation's forests as well as a vital partner in creating solutions for preservation of our nation's climate.

Many on this committee might find it odd for a trade association that represents loggers and truckers in the state of Maine, typically a conservative group, to stand before you today to discuss how timber harvesting can be part of the solution and not part of the problem in terms of climate change. With that in mind, I can say with great honesty that this perception is not reality when it comes to Maine's logging and trucking community. Over the last twenty years, we have learned to recognize and prepare for our role in climate mitigation through our work on the ground. Loggers have become accustomed to wildly changing weather patterns, mud seasons that extend not just weeks but months, and the influence of invasive species and pests in the forest. As a result, we have been required to adapt quickly, but also develop a broad

perspective and plan for change.

Two decades ago, Maine's logging community could work between 46 and 52 weeks a year. Mud season was restricted to April and May and employees could count on steady work and more consistent operating conditions. However, that has changed considerably, and now, the expectation is that between 38 and 44 weeks per year is all we can expect for durational work time. It is clear to Maine's legacy industry that climate and weather patterns have indeed changed, and this change is adding cost and lowering profitability for our membership.

During this same time frame, there has been an ad hoc approach to both technology and public policy, at both the state and federal levels, which has attempted to bring about change for the improvement of the climate. While well intended, policy changes with respect to mandates have brought about positive change on one side, but they have also had a dramatic negative impact upon our industry.

One primary example of this is in the mandated use of Tier IV engines by the federal government. While this technology has been positive in terms of curbing emissions, it was not implemented with a tremendous amount of thought as to how it would impact the supply chain. Unfortunately, it has negatively impacted our industry by increasing cost on every piece of equipment used in logging and trucking today. The law of unintended consequences has increased the cost of all equipment about 25-50% over the last ten years. Loggers and truckers are price takers and have no ability to charge more for the work that they do, thus, this has steadily bled many of their busineses to death. It is our opinion that changes like this can have a positive impact, especially upon our climate, but the consequences must be balanced with the benefits. It is vital for loggers and truckers to have a seat at the table in deliberations that affect our member's businesses so exponentially.

From a state perspective, I would like to say that Maine is taking a leadership role in how it will manage climate change and utilize the positive role of forests to do so. In the last two years, Maine Governor Janet Mills created a Climate Council, as well as a Forest Carbon Program Task Force, to come up with plans for how the state would mitigate climate change, but also to study how Maine's forests can be utilized as a part of the long-term solution. I am a member of the Natural and Working Lands Working Group of the Maine Climate Council, which was created in statute in 2019, as well as the Maine Forest Carbon Program Task Force, which was established by Executive order on January 13, 2021.

In both the Mills' Administration Climate Action Plan as well as the Governor's Executive Order that created the Forest Carbon Task Force, there is tremendous recognition of the role that Maine's forests play in carbon storage and climate mitigation. At their core, both efforts establish firmly that if Maine is going to achieve both goals through the use of its forests, Maine cannot harvest less wood in the future than it has in the past, it must have markets for low grade wood to grow more high-quality saw log timber and the role that harvesting contractors can play in the process is monumental.

With respect to the work done by contractors, both initiatives reference identifying incentives to promote high-quality, on the ground performance by loggers and investment in low impact harvesting equipment. To achieve both goals, contractors must work to reduce emissions and minimize impacts to the residual forest ecosystem at the point of harvest. Both are expensive ideas that will not be incentivized by the traditional wood procurement system. Therefore, they will require financial incentives to implement both climate solutions and we feel that there

should not only be recognition of this cost, but that federal and state policy should help to incentivize their implementation.

To minimize compaction and disturbance of forest soils, contractors must purchase and utilize low ground pressure harvesting equipment with tracks. However, all harvesting equipment today is extremely expensive with most tracked equipment carrying a sticker price in excess of $500,000 per piece. The Maine Forestry Direct Link Loan Program was created in 2007 within the Maine Department of Environmental Protection, the Maine Bond Bank and the Department of Agriculture, Conservation and Forestry to incentivize the purchase of this equipment with low interest loans for logging companies. The program was created with US EPA Clean Water State Revolving Fund resources and has dedicated $12 million to the program since that point in time. However, because of how expensive equipment is today, the current pool of funding cannot adequately serve the purpose that it was intended for and the program needs to be expanded to encourage new investment in the future. This will take federal resources and should be emulated across the country.

Lastly, we feel strongly that both state and federal resources should be invested to support higher level on-the-ground performance to encourage climate friendly timber harvesting. In 2000, our organization created the Master Logger Certification Program (MLCP) as the world's first point-of-harvest certification program, offering third party independent certification of logging companies' harvesting practices. MLCP was recognized with the world's first SmartLogging Certificate in 2005. The SmartLogging certificate is a third-party, performance-based audit and certification program of timber harvesting practices. It represents an independent and global recognition of the integrity of the MLCP Standard. SmartLogging surveillance audits occur every year and full audits are conducted on a five-year basis by the global certifying body NEPCon.

The MLCP performance standard is guided by nine goals: Harvest Planning, Protecting Water Quality, Maintaining Soil Productivity, Sustaining Forest Ecosystems, Managing Aesthetics, Ensuring Workplace Safety, Demonstrating Continuous Improvement, Ensuring Business Viability, and Upholding the Integrity of the Certificate. To become a certified company, a candidate must go through a series of interviews, background and reference checks, and a rigorous field audit of current and past harvest sites. The field audits are performed by independent licensed foresters that have participated in initial and on-going training. This detailed information is then sent to the Certification Board for review. The Certification Board consists of state representatives, university faculty, retired loggers, and an environmental attorney.

Once certified, a company must submit annual business/harvest data and is required to be field audited after two years and then every four years thereafter. There are also random audits and an anonymous 800-number that the public can call to report any concerning activity.
The Master Logger application and recertification process provides crucial on-the ground verification of criteria that is critical to the integrity of the image of the industry to the public and environmental groups, including: identification and protection of rare, endangered, and threatened species; demonstration of Best Management Practices; and analyzation of visual impacts and forest aesthetics. These are important issues and the MLCP provides the verification mechanism to prove that they are being incorporated in practice on the ground.

Currently, there are 130 MLCP companies in the seven-state region of the northeast. However, MLCP is not just a regional program. MLCP has also been recognized in 13 other states in the

US in partnership with the American Loggers Council, and it has been adopted in Canada, Columbia, Japan, and Estonia, with future growth in Australia, Finland, New Zealand, South Africa and Sweden on the horizon. MLCP, similar to forest certification programs such as the American Tree Farm System, Forest Stewardship Council (FSC), and the Sustainable Forestry Initiative (SFI), has an impact upon sustainability and responsible forest management, and it started right here in the state of Maine. It must not only be recognized by the federal government, but encouraged and facilitated throughout this country to ensure that harvesting can occur with integrity as a solution and not a problem within our climate framework.

In closing, Maine's loggers are a vital part of the state's forest products sector and the state's economy. They should be recognized and celebrated for the work they do as a vital part of a solution to our climate issues.

Thank you for the opportunity to provide the opinion of our membership before you today and I would be happy to answer any questions you may have.

Written Testimony of Dr. Adam Daigneault
Associate Professor of Forest Policy and Economics, University of Maine

Submitted to the House Committee on Small Business Subcommittee on Underserved, Agricultural, and Rural Development Hearing on "Sustainable Forestry's Role in Climate Solutions" September 29, 2021

Thank you, Chairman Golden, Ranking Member Hagedorn, and members of the subcommittee for holding this hearing today and for the opportunity to testify on this important topic. I am Dr. Adam Daigneault, Associate Professor of Forest Policy and Economics at the University of Maine. I have been working on issues related to forest management, economics, and policy for nearly two decades. Much of my research focuses on quantifying synergies and tradeoffs for sustainably managing forests for timber, carbon, and other co-benefits.

Forests across the globe are highly valued for the diverse ecosystem services that they provide, including the production of timber, fiber and fuel resources, carbon sequestration, climate change mitigation, freshwater, habitat, recreation, and preservation of cultural values. Across the U.S., forestry-related businesses support at least 2.9 million total jobs and generate about $108 billion per annum in GDP, nearly 6% of total manufacturing GDP[1]. In Maine, the forest sector as it accounts for nearly 5% of the total GDP (one of the highest in the U.S.) and has an annual economic impact of $8 billion, while also supporting other important sectors of Maine's economy such as recreation and ecotourism[2]. Forest resources across the country face increasing pressures from land use change, shifting markets, federal and state policy, and climate change. From ecological, economic, and social perspectives, there is a growing interest in the value of forest ecosystem services, and how these services can be enhanced through sustainable forest management. In this context, sustainability is generally understood as "the management of forests to meet the needs of the present without compromising the ability of future generations to meet their own needs."

U.S. forest ecosystems and the wood they produce are a large carbon sink. Forests and wood products currently sequester about 800 million metric tons of carbon dioxide equivalent per annum ($MtCO_2e/yr$) in the U.S., thereby removing 12% of annual greenhouse gas (GHG) emissions and making the total land sector a net sink (i.e., carbon sequestration is greater than emissions)[3]. For reference, wood products carbon accounts for about 15% of the total annual sequestration, although their contribution can vary by region and mix of products[4]. Forest carbon sequestration levels in the U.S. have been relatively steady in recent years, but it is uncertain to

[1] https://nafoalliance.org/wp-content/uploads/2018/11/Forest2Market_Economic_Impact_of_Privately-Owned_Forests_April2019.pdf
[2] https://maineforest.org/wp-content/uploads/2021/09/The-2019-Statewide-Economic-Contribution-of-Maines-Forest-Products-Sector.pdf
[3] https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019
[4] https://crsf.umaine.edu/forest-climate-change-initiative/ncs/

what degree this trend will persist in the future, especially under changing socioeconomic and climatic conditions[5,6].

Forests have immense potential to help mitigate climate change. Already a large sink, U.S. forests can sequester even more carbon if landowners are provided the adequate incentives and technical assistance. Recent studies indicate that there's the potential for 190-675 $MtCO_2e/yr$ increase in forest sequestration from our forests, a 24-84% increase over recent annual estimates[7,8,9]. Further, a large proportion of this additional carbon could occur at relatively low economic cost, thereby making it an effective option to help achieve regional, national, and global climate change mitigation targets. In response, several public and private initiatives to protect and enhance forest carbon sequestration have emerged. For example, Maine's forest ecosystems and harvested products currently remove about 70% of the state's annual GHG emissions[10]. Further, the state has a goal of being net zero by 2045, and that goal should be achieved ahead of time Maine's forests can maintain current sequestration rates while the state continues to meet its fossil fuel GHG emissions reduction target of an 80% reduction below 1990 levels by 2050[11,12].

Well managed forests can simultaneously provide a wide range of co-benefits to society. These include wood production, carbon sequestration, recreation, clean air and water, and wildlife habitat. It is possible for all these ecosystem services to be provided at the landscape-level through a holistic management perspective. Doing so would require managing towards a balance of species and age class diversity, including a mix of early and late successional forests, timber plantations, and ecological reserves. Further, the pressures of climate change and growing demands of society mean that letting nature do what it has in the past is not a viable option to sustainably maintain the full suite of services that our forests provide.

Sustainable forest management and harvests are key to enhancing forest carbon sinks. Active management over the past century has helped our forests sequester and store more carbon than they would otherwise[13]. Without active management, forests are less resilient to climate change, grow slower, can become saturated, and are sequestering less carbon than otherwise. The annual mortality of standing timber in the U.S. has increased over the past few decades due to over maturity and increases in wildfire, insect infestations, and disease. For example, Maine has

---

[5] Tian, X., Sohngen, B., Baker, J., Ohrel, S., & Fawcett, A. A. (2018). Will US forests continue to be a carbon sink?. *Land Economics*, *94*(1), 97-113.

[6] Nepal, P., Ince, P. J., Skog, K. E., & Chang, S. J. (2012). Projection of US forest sector carbon sequestration under US and global timber market and wood energy consumption scenarios, 2010–2060. *Biomass and Bioenergy*, 45, 251-264.

[7] Fargione, J.E., Bassett, S., Boucher, T., Bridgham, S.D., Conant, R.T., Cook-Patton, S.C., Ellis, P.W., Falcucci, A., Fourqurean, J.W., Gopalakrishna, T. & Gu, H., 2018. Natural climate solutions for the United States. *Science Advances*, 4(11), p.eaat1869.

[8] Austin, K. G., Baker, J. S., Sohngen, B. L., Wade, C. M., Daigneault, A., Ohrel, S. B., Ragnauth., S., & Bean, A. (2020). The economic costs of planting, preserving, and managing the world's forests to mitigate climate change. *Nature Communications*, 11(1), 1-9.

[9] VanWinkle, C., Baker, J.S., Lapidus, D., Ohrel, S., Steller, J., Latta, G., & Birur, D. (2017). *US Forest Sector Greenhouse Mitigation Potential and Implications for Nationally Determined Contributions* (RTI Press).

[10] https://crsf.umaine.edu/forest-climate-change-initiative/carbon-budget/

[11] https://www.maine.gov/future/initiatives/climate/climate-council/forest-carbon-taskforce

[12] 38 M.R.S. § 576A (2019). http://legislature.maine.gov/statutes/38/title38sec576-A.html

[13] Mendelsohn, R., & Sohngen, B. (2019). The net carbon emissions from historic land use and land use change. *Journal of Forest Economics*, 34(3-4), 263-283.

some of the highest densities of non-native forest pests in the U.S., and their impacts will continue to increase in the coming decades due to climate change[14]. Trees that are declining rapidly or dead can become carbon emitters. The efficacy of forests, forest products, and woody biomass in addressing climate change is highly dependent on sustainable forest management.

A wide range of sustainable forest management practices can be used to promote climate solutions while maintaining timber supply. First, forests should be made more resilient by harvesting and quickly regenerating sites with desired species that are resistant to climate change, managing competition from invasives and undesirable species, and reducing the risk of loss to natural disturbance. Second, more forests need to undergo intermediate treatments to increase their growth and yield, and investment in more intensive management should target high productivity sites. These include increasing stocking in understocked stands and conducting thinning in immature and overstocked stands to stimulate growth and health of the remaining trees. Doing so will increase the proportion of harvested materials for durable wood products, thereby increasing the amount of carbon stored over time. Third, sustainable harvesting should be done by professionals trained in climate-friendly practices to minimize stand damage and soil disturbances. Last, some forests should be conserved or designated as reserves, particularly healthy sites with high carbon density and special ecological value.

Recent changes in the forest products industry have placed added pressure on the need to find new and diversified markets to support our rural economies and the forest resources upon which they rely on. These include advances in technology and changing demand over the past decade, which have resulted in the closure of pulp and paper mills and other wood manufacturing facilities. In Maine, this has reduced the total economic impact of the industry by several hundred million dollars with a concurrent loss of thousands of logging, forestry, and wood product manufacturing jobs. This has had a noticeable impact on several of Maine's rural communities, who are struggling to find ways to rebound from these recent closures. The aggregate market loss for the sector over recent years poses a challenge to the entire supply chain, raising concerns among landowners and industry stakeholders about the future economic outlook of the forest products industry. In response, communities across the country are working to identify new opportunities to sustainably utilize our abundant forest resources.

Continued research and development into new and more efficient uses of wood are critical to supporting our rural economies. Available timber supply exceeds wood product demand in many parts of the U.S., thereby impacting several parts of the forest sector supply chain. Identifying emerging uses and markets for wood can complement traditional forest products and increasing demand can provide landowners more opportunities for active management and harvesting for wide range of timber. Uses that are being actively explored include pellets and other forms of wood bioenergy, liquid biofuels, mass timber, nanocellulose-based products, and biochar. The University of Maine currently researching and developing the application and

[14] Arnold et al., (2020). Scientific Assessment of Climate Change and Its Effects in Maine. Maine Climate Council Scientific and Technical Subcommittee Report, August 2020. https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/GOPIF_STS_REPORT_092320.pdf

commercialization of many of these new innovations. Much of this research has been initiated through federal grants from the USDA, DOE, and NSF.

Forest markets are critical to maintaining the health and sustainability of our forests. Providing more consistent and increased demand for forest-based materials is good for both addressing climate change and increasing forest sequestration. A recent study from the University of Maine and U.S. Forest Service found that a significant portion of U.S. forests are reaching a critical biological tipping point where net sequestration of forests could decrease due to reduced growth and increased mortality[15]. The lack of low-grade markets is likely an important contributor to these observed trends. Finding new uses for wood and supporting rural communities to ensure a vibrant workforce can help improve the health of our forests. Robust and stable timber markets enable the carefully planned harvest of trees that is needed for forests to have appropriate stocking levels, balanced age classes, and species diversity. Innovative university-industry partnerships like NSF's Center for Advanced Forestry Systems (CAFS) are focusing on using technology to better refine and tailor management regimes across the US.

Markets play a key role in keeping forests as forests. Land is a commodity, and low value land is at risk of being converted to alternative uses. Thus, we need to promote all grades of wood markets as well as markets for other forest uses that will help maintain or increase its value and reduce deforestation. For context, nearly 50 $MtCO_2e/yr$ in emissions is generated annually from forests being converted to cropland[16], equivalent to the annual GHG emissions of 11 million passenger vehicles[17].

Timber harvesting is necessary to meet societal needs and mitigate climate change. Nearly 20% of U.S. forest carbon sequestration is attributed to harvested wood products. In areas like Maine, timber products from managed forests contribute to about 30% of the annual carbon sequestration. Wood is also a renewable resource that can be substituted for more emissions-intensive materials such as steel and concrete. Further, reducing harvests in one area is likely to cause harvests to increase elsewhere, a term known as 'leakage', thereby resulting in less overall carbon benefits[18]. Incentivizing sustainable practices that maintain or increase both harvests and forest carbon will be a win-win for society and the climate.

Woody biomass and bioenergy are a part of the climate solution. The lack of low-grade markets has created challenges for active forest management and resulted in extensive forest areas at risk due to overstocking. Bioenergy is a logical and environmentally friendly use of forests, as it removes the low-grade material that would most likely die of natural causes and release carbon to the atmosphere. Capturing this mortality and putting it to use can reduce fossil-based energy and emissions. Increasing demand for biomass also increases the value of a forest, thereby incentivizing more investment in timberland and forest management. This investment

---

[15] Woodall, C. W., & Weiskittel, A. R. (2021). Relative density of United States forests has shifted to higher levels over last two decades with important implications for future dynamics. *Scientific Reports*, 11(1), 1-12.

[16] https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-chapter-6-land-use-land-use-change-and-forestry.pdf

[17] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

[18] Pan, W., Kim, M. K., Ning, Z., & Yang, H. (2020). Carbon leakage in energy/forest sectors and climate policy implications using meta-analysis. *Forest Policy and Economics*, 115, 102161.

can both positively impact forest health and carbon sequestration potential. A federal renewable energy standard for woody biomass harvested from sustainable forests is one way to improve markets for low-grade wood.

Forest climate solutions are vulnerable to climate change and other disturbances that could reduce their effectiveness as a climate solution. Climate change is already having direct impact on U.S. forests, significantly affecting the forest ecosystems and economy. These impacts are likely to grow in the future. Forestry and forest operations are already hampered overall with a heightened level of uncertainty due to variability in the weather and extreme events that makes managing the biology and operations of a forest increasingly difficult and often more expensive. We are already experiencing the impacts on wildfire frequency and intensity, particularly in the West. Climate change will also increase the likelihood of sustained drought in some regions. In other areas, it will result in more frequent and intense flooding. In places like Maine, it has made forest management and operations more difficult, particularly in the winter due to unfrozen and variable ground. Changing weather patterns can also introduce new pathogens and invasive species, thereby increasing the risk of tree mortality. Climate change could also have a positive impact on the growth and yield of some species, although those species are not always the most economically or environmentally desirable. More active management that focuses on reducing wildfire fuels and increasing forest health and resilience will help forests maximize their potential to be a reliable and cost-effective climate solution.

Several federal programs could be utilized to incentivize forest management and enhance carbon sinks, particularly with increased prioritization and funding. These include the Environmental Quality Incentives Program, the Forest Stewardship Program, the Forest Legacy Program, and the Forest Inventory and Analysis Program. Enhancing the funding and scope of these programs can increase both U.S. forest carbon stocks and the flow of timber products by helping improve forest conditions and wood utilization. Additional programs and funding must also be devoted to fuel treatment to help reduce the risk of wildfire. Further, maintaining or increasing federal tax incentives such as the management deductions and reforestation credits could further incentivize landowners to actively manage their land for timber, carbon, and other co-benefits. Expanding the type of woody material that qualifies for bioenergy would be a simple yet effective policy that would improve carbon sequestration and support more sustainable forest management too. In addition, we must continue to support R&D in the forest products and land management sectors through federal grants from the USDA, DOE, NSF, EDA, and more.

The opportunities and challenges for sustainably managing our forests for timber, carbon, and other ecosystem services are complex. Given the complexity of the changes to our forest ecosystem and forest products sector and the speed at which they can occur, there is more need than ever to employ the very best science to inform decision-making. The opportunities for forests and wood products to contribute to both carbon and sustainability goals have never been more critical. At the same time, careful analysis of both the carbon costs and benefits and the timeline of impacts is essential to assure that the forest contribution to eliminating anthropogenic greenhouse gas emissions is a net benefit to the global. This is particularly the case for the next several decades, as negative emissions technologies such as forest carbon sequestration will be

essential to mitigate the impacts of climate change. Further, we must continue to identify and promote sustainable opportunities to simultaneously improve the health of our forest ecosystems and the economies and people who are dependent on this important natural resource.

Thank you again for the opportunity to speak on this important topic. I invite you all to visit Maine and see all the great things that are going on at our universities and working forests to implement sustainable forest management and grow our forest economy.

TESTIMONY OF MARK THIBODEAU

REGIONAL MANAGER, ReENERGY BIOMASS OPERATIONS LLC

SUBCOMMITTEE ON UNDERSERVED, AGRICULTURAL, AND RURAL BUSINESS DEVELOPMENT
HOUSE COMMITTEE ON SMALL BUSINESS

SEPTEMBER 29, 2021

"Sustainable Forestry's Role in Climate Solutions"

Good morning Chairman Jared Golden, Ranking Member Jim Hagedorn and members of the Subcommittee.

Thank you for the opportunity to appear before you to discuss sustainable forestry's role as a climate solution. I will speak specifically to wood energy as a climate solution.

I am Mark Thibodeau. I am a lifelong Mainer and I am a graduate of Maine Maritime Academy with a degree in Marine Systems Engineering. I live in Maine's 2nd Congressional district and I serve as regional manager for ReEnergy Biomass Operations in Maine. I have managed five biomass power generation plants in the state of Maine in the course of my career, as well as five in California. Before joining ReEnergy in 2012, I served as Director of Biomass Operations for Covanta Energy. Prior to that, I was a Field Engineer in General Electric's Energy Services Division, performing major overhauls on steam turbine generators. I hold a 1st Class Stationary Engineers license in Maine.

About ReEnergy

ReEnergy Biomass Operations operates two biomass power facilities in Maine, both in the 2nd Congressional district, that generate baseload renewable electricity. At these facilities in Livermore Falls (39 MW) and Stratton (48 MW), we use sustainably harvested forest and mill residue as fuel to generate homegrown, renewable electricity. These facilities directly employ about 50 people and support hundreds more jobs in the logging and trucking industries while providing the forestry industry an important revenue stream for their wood residues. The facilities generate approximately 640,000 megawatt-hours of baseload renewable electricity each year, which is enough to supply power to 83,000 homes. Baseload power is electricity that is generated 24/7, and is an important complement to intermittent sources of power like wind and solar. The Stratton facility also provides electricity directly to an adjacent lumber mill. Our wood ash from Stratton, also known as "fly ash," is used by more than 100 Maine farms as a soil amendment for balancing soil pH and enhancing nutrient levels.

ReEnergy also operates a 60-MW biomass power facility in New York State, ReEnergy Black River, which is located inside the fence at the U.S. Army installation Fort Drum. That plant provides all of the post's electricity from behind-the-meter, creating energy security and resiliency. Lastly, we operate the 50-MW Albany Green Energy, a 50-MW biomass heat-and-power facility located in Albany, Georgia, which supplies electricity to Georgia Power and steam to Procter & Gamble and a nearby Marine Corps Logistics Base.

How Biomass Energy Supports Sustainable Forestry

Sustainable forestry is an important contributor to mitigating climate change and reducing the risk of wildfire. When forested lands are maintained and harvested in a sustainable way, the forest continues to grow and consume atmospheric carbon. Wood markets and wood utilization are essential to forest maintenance; without an outlet for owners to sell their harvested wood, the owners are more likely to sell the land for other uses. Biomass power is an important component of the larger wood market. After the higher-value fibers are sold to make lumber, furniture or paper, the landowner is left with lower value fibers like tops, limbs and thinnings that cannot easily be made into other wood products. When these "leftovers" or residues are sold to a biomass power facility, the landowner is able to further capitalize on their harvest and the unusable fibers go toward generating baseloaded renewable energy.

U.S. biomass power facilities are located primarily in rural areas with active forest and/or agricultural economies. We use fuels that are residuals and byproducts of forest products and agricultural businesses, adding an additional and often much-needed revenue stream to these sectors and utilizing materials that often have very few other uses. In some areas, biomass power facilities are actively involved in the reduction of catastrophic wildfires by repurposing forest debris that is very hazardous during wildfire season.

Our fuel suppliers follow best management practices that ensure sustainable forest management. We expect our suppliers to follow these best management practices with respect to water quality, protection of endangered and threatened species, logger training and reforestation. In all of our communities, forest growth greatly exceeds removals.

Carbon Benefits of Biomass

Energy generated from biomass is recognized as having carbon benefits by most scientists, as well as many environmental organizations and regulators in the U.S. and many other countries. This is because the carbon released by biomass power generation is already a part of the carbon circulating between the atmosphere and the biosphere (e.g., trees and plants). Thus, like other types of renewable energy including wind, solar, geothermal and hydro, biomass energy production displaces GHG emissions that would have been produced had that energy been generated from fossil fuels.

Even though biogenic emissions generate CO_2 on a gross basis, when the lifecycle benefits of biomass are calculated, the net emissions from biomass are considered negligible, "neutral" or even "negative," depending upon the type of biomass.

Additionally and uniquely among renewable energy technologies, biomass energy also reduces net GHG emissions in a second way. The use of biomass for energy generation avoids the higher GHG emissions associated with alternative means of biomass disposal. If not used as fuel, biomass could have several different fates – decaying in the forest, open burning, landfilling, composting or other means of disposal. Each of these alternatives has a greater greenhouse effect than does biomass power generation because they produce and release significant quantities of methane, which is 25 times more potent as a GHG than carbon dioxide. The controlled combustion of biomass for electrical power generation converts essentially all of the carbon into less potent carbon dioxide.

In 2007, the Intergovernmental Panel on Climate Change (IPCC) synthesized decades of research on the use of forests and forest products to mitigate greenhouse gases (GHG), and concluded, "In the long-term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber or *energy* from the forest, will generate the *largest sustained mitigation benefit*" (emphasis added). [1] The IPCC's conclusion was based on the idea that energy, including electricity, produced from forest biomass returns carbon to the atmosphere that plants recently absorbed. It results in an extremely low net release of carbon as long as forest inventories are stable or increasing – as is the case in Maine and the United States as a whole.

Conversely, energy from burning fossil fuels releases carbon that has resided under the Earth's surface for millions of years, effectively creating a one-way flow to the atmosphere. Importantly, whether emissions from fossil fuel combustion are ultimately absorbed by land, ocean or forests, they are not returned to fossil fuel reserves on anything less than a geologic time scale. In fact, this is the root cause of climate change: humans have been emitting carbon into the atmosphere that has been locked in the Earth for hundreds of millions of years at a rate which the atmosphere cannot assimilate. As the IPCC notes, nearly 90% of these emissions are from burning fossil fuels and cement production. Using wood to produce electricity avoids the flow of geologic carbon to the atmosphere, thereby providing a real and permanent climate change benefit, provided that energy offsets the use of fossil fuels.

The peer-reviewed literature is absolutely clear: although "the timing of benefits from substituting sustainably produced forest based fuels and products for more GHG intensive alternatives is sometimes debated, the fact that these ultimate benefits exist is not. .... [Agreement] on this issue is based on an extensive body of research, dating at least to the mid-1990s ..., and reinforced by [nearly 25] ... recent studies and reviews focusing on forest-based energy as a substitute for fossil fuels." A review of this literature caused researchers to conclude, "As long as land remains in forest, long term carbon mitigation benefits are derived from sustainably managed working forests that provide an ongoing output of wood ... to produce long-lived products and bioenergy, displacing GHG-intensive alternatives."[2]

The impacts of forest harvesting on carbon emissions are important, yet counterintuitive. The demand for wood (1) keeps land in forests, (2) provides incentives for expanding forests and improving forest productivity, and (3) supports investments in sustainable forest management that can help offset the forest carbon impacts of increased demand. The history of U.S. forests shows that increased demand can be met without reducing forested area or forest carbon stocks. [3]

Research demonstrates that demand for wood in the United States results in investments in forestry that help to prevent loss of forest, which is caused primarily by urbanization and development, and incentivize afforestation (i.e., the planting of forests). In the face of pressures to convert land to other

---

[1] Nabuurs, G.J., O. Masera, K. Andrasko, P. Benitez-Ponce, R. Boer, M. Dutschke, E. Elsiddig, et al. 2007. Forestry. Chapter 9 in Climate change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Metz, B., O.R. Davidson, P.R. Bosch, R. Dave, and L.A. Meyer (eds.). Cambridge University Press, Cambridge, UK. p. 543

[2] Miner, R.A., R.C. Abt, J.L. Bowyer, M.A. Buford, R.W. Malmsheimer, J. O'Laughlin, E.E. Oneil, R.A. Sedjo, and K.E. Skog. 2014. Forest Carbon Accounting Considerations in U.S. Bioenergy Policy. Journal of Forestry 112(6):590-605, p.593

[3] Miner, R.A., R.C. Abt, J.L. Bowyer, M.A. Buford, R.W. Malmsheimer, J. O'Laughlin, E.E. Oneil, R.A. Sedjo, and K.E. Skog. 2014. Forest Carbon Accounting Considerations in U.S. Bioenergy Policy. Journal of Forestry 112(6):590-605, p.594

uses, increased wood demand in the United States can slow the loss of forested area in the face of pressures to convert land to other uses. For example, a study published in Environmental Science and Technology projected that, as a result of increased wood demand for energy, U.S. forest area could expand by 4 to 8.6 million acres by 2015 and 11.9 to 26.9 million acres by 2030. [4] "Other studies have found that where the investment response to increased demand is strong, it can increase both forest area and forest carbon stocks, especially where investments are made in anticipation of increased demand." [5]

The Biden Administration's Environmental Protection Agency (EPA) Deputy Administrator, Janet McCabe, recognized the benefits of using biomass from wastes and residuals when she served as Acting Assistant Administrator of the Office of Air and Radiation at EPA in the Obama Administration. In a November 2014 memorandum about the role of biomass in the Clean Power Plan, she wrote: "Information considered in preparing the second draft of the Framework, including the SAB [Scientific Advisory Board] peer review and stakeholder input, supports the finding that use of waste-derived feedstocks and certain forest-derived industrial byproducts are likely to have minimal or no net atmospheric contributions of biogenic CO_2 emissions, or even reduce such impacts, when compared with an alternate fate of disposal."[6]

Federal Policy Issues

With respect to federal policy issues, we are active members of the Biomass Power Association, which represents domestic biomass power producers who source fuels from their local communities.

It often seems to us that domestic biomass power is the least understood renewable energy resource. We have been working for years to urge the Environmental Protection Agency to implement the electricity portion of the Renewable Fuel Standard, and activate its biomass pathways, for example, and to address definitional interpretations of the term "biomass" in the Renewable Fuel Standard.

Without equitable policy support, it can become difficult for biomass to serve as a robust part of the country's renewable energy portfolio. We have been trying to address tax inequities that prioritize the growth of other renewable technologies at the expense of biomass and other baseloads. We have serious concerns about the Clean Electricity Performance Program, which has been endorsed by the House Committee on Energy and Commerce but does not specify that biomass power emissions would be measured on a net basis using a life-cycle analysis.

---

[4] Daigneault, A., B. Sohngen, AND R. Sedjo. 2012. Economic approach to assess the forest carbon implications of biomass energy. Environmental Science and Technology 46:5664 –5671.

[5] Miner, R.A., R.C. Abt, J.L. Bowyer, M.A. Buford, R.W. Malmsheimer, J. O'Laughlin, E.E. Oneil, R.A. Sedjo, and K.E. Skog. 2014. Forest Carbon Accounting Considerations in U.S. Bioenergy Policy. Journal of Forestry 112(6):590-605, p.596

[6] EPA's Addressing Biogenic Carbon Dioxide Emissions from Stationary Sources, Janet McCabe, Nov. 14, 2014, found at https://archive.epa.gov/epa/sites/production/files/2016-08/documents/biogenic-co2-emissions-memo-111914.pdf

The Role of Underserved Communities

In closing, it is important to note, given one of the primary focuses of this committee, that there are many underserved communities across the country that rely on forestry for income, with biomass being part of their revenue stream. For example:

- Native Americans are among the largest owners of commercial forestry resources in the United States, controlling 16 million acres of forestland. Some of our fuel at our facilities here in Maine come from tribal land managed by the Penobscot Nation.
- The Indian Land Tenure Foundation in Minnesota provides grants and services to Indian nations and individual Indian people focused on recovering land within reservation boundaries and off-reservation sacred sites to Indian ownership and management.
- The White Mountain Apache Tribe in Whiteriver, Arizona manages a 1.6-million-acre reservation, much of it forested. The Apache land is at high risk of forest fire, and the Tribe works its forests to reduce the risk of catastrophic fire. Novo Power, a biomass power plant located in Snowflake, AZ, purchases more than 1,000 tons of fuel annually from the Tribe.
- The Center for Heirs' Property in South Carolina assists people in preserving their land as working forests.
- North Carolina State University's College of Natural Resources works to recruiting minorities to the forestry industry.

I appreciate the opportunity to provide testimony to the Committee and I thank you for your public service. Please feel free to contact me at any time with questions or concerns.

House Small Business Committee

Subcommittee on Underserved, Agricultural, and Rural Business Development

"Sustainable Forestry's Role in Climate Solutions"
Hearing

Testimony of Scott Dane
American Loggers Council

INTRODUCTION

Chairman Golden, Ranking Member Hagedorn and esteemed committee members of the subcommittee on Underserved, Agricultural, and Rural Business Development, I appear before you today on behalf of the American Loggers Council, a nonprofit timber industry trade association representing 30 states, to address the role that the forest industry performs in supporting sustainable forestry and the contribution that healthy managed forests provide in addressing climate issues.

Put simply, loggers ensure healthy forests. As a Minnesota DNR Commissioner told a prior Governor:

"Governor, the Minnesota DNR doesn't manage the forests ..... the loggers do it for us."

LOGGERS – THE SUSTAINABLE FORESTRY TOOL

Public and private land managers cannot accomplish their healthy forest objectives without loggers. Healthy forests depend upon a healthy, stable, and sustainable timber industry. You can have both, but you cannot have one, healthy forests, without the other – loggers.

It will require a fine balance of land management, logging and transportation infrastructure, and forest product mills. A disruption or loss of any segment of this supply chain will create an irreparable breakdown in the interdependent balance. If timber availability is not consistent and dependable, mills will not

locate where there is not reliable resource availability. This has recently been experienced in South Dakota, where a mill closed after 50 years because the US Forest Service indicated that they would not be offering the volume of timber necessary to continue operations. When the mills close, the logging infrastructure and capacity collapses. Unfortunately, as in this situation when the U.S. Forest Service decides that it is time to increase forest management activity, the logging and mill industry infrastructure will not exist. It will not be possible at that time to reestablish harvesting investments or end use mills, so the U.S. Forest Service will not be able to "manage" their forests which will ultimately die or burn.

This was experienced with the lodgepole pine beetles in Colorado. Mountainsides were covered with brown dead timber. When the officials realized the potential for catastrophic wildfires that the dead timber represented and wanted to remove it, they became aware that they no longer had the logging, transportation, or mill infrastructure in Colorado necessary because of decades of opposition to active logging and forest management.

Teddy Roosevelt, the "Conservation President" gave a speech to the Society of American Foresters in 1903 where he said;

First and foremost, you can never afford to forget for one moment what is the object of the forest policy. Primarily that object is not to preserve forests because they are beautiful—though that is good in itself—not to preserve them because they are refuges for the wild creatures of the wilderness—though that too is good in itself—but the primary object of the forest policy as of the land policy of the United States, is the making of prosperous homes, is part of the traditional policy of home-making of our country. Every other consideration comes as secondary. The whole effort of the government in dealing with the forests must be directed to this end, keeping in view the fact that it is not only necessary to start the homes as prosperous, but to keep them so. That is the way the forests have need to be kept.

You must remember that the forest which contributes nothing to the wealth, progress, or safety of the country is of no interest to the government, and it should be of little to the forester. Your attention should be directed not to the preservation of the forests as an end in itself, but as the means for preserving and

increasing the prosperity of the Nation. Forestry is the preservation of forests by wise use.

The most striking and encouraging fact in the forest situation is that lumbermen are realizing that practical lumbering and practical forestry are allies and not enemies, and that the future of each depends upon the other.

Sustainable forestry, as stated by President Roosevelt over 100 years ago requires management, including "wise use". Today's loggers (lumbermen) and forest managers (forestry) share a mutual objective and are dependent upon one another. Because without the timber and forest products industry sustainable forestry is not possible. President Roosevelt understood that 100 years ago, we need to return to that understanding today.

LOGGING INDUSTRY CHALLENGES, THREATS AND NEEDS

The logging industry represents small business jobs in rural America. Although the timber resource continues to increase, the logging industry continues to decrease. This is the result of minimal profit margins, high capital investment requirements, forest products mill closures due to shifting markets (and the COVID pandemic) for traditional forest products such as paper, and workforce development challenges.

For the most part, loggers have seen little to no increase in the delivered price for wood sold to mills in the last ten years. While, during the same period, equipment costs have increased 30%, insurance premiums have increased 20%, and recently fuel prices have increased 50%. When lumber prices skyrocketed this year, most loggers did not see any benefit and in some cases experienced price cuts.

From a workforce development perspective, the timber industry workforce is aging with the median age over 50 years. This workforce is predicted to continue to decline by 14% over the next 8 years. Logging is difficult and dangerous work, but those risks are not reflected in the wages and benefits paid. Logging is not competitive with other comparable industries and younger workers are not entering the logging industry at the rate that older workers are leaving.

One of the greatest challenges is transportation. There is not enough trucking capacity to meet the demand. Additionally, insurance rates in some regions are $10,000 to $15,000 per year per truck. Trucking is the weak link in the timber industry supply chain.

The timber industry is stressed and needs assistance to address these challenges and threats. The American Loggers Council has submitted a Briefing Paper as part of our full testimony that addresses these challenges and proposes legislative and policy changes that would provide assistance in resolving some of these issues.

HEALTHY FOREST AND THE CLIMATE

However, this is about more than rural agricultural jobs. Healthy forests are vital to addressing climate change and particularly carbon sequestration. Nothing absorbs and stores more carbon than the forests. That is why the global trillion tree initiative was joined by the United States in recognition of the carbon sequestration role that trees provide.

Carbon sequestration decreases in woodlands as they age. The following shows carbon sequestration rates by ages, represented by total carbon in above and below ground trees across all forest types in Minnesota:

- 10-year-old forests: 0.60 tons of carbon per acre per year
- 50-year-old forests: 0.20 tons of carbon per acre per year
- 100-year-old forests: 0.15 tons of carbon per acre per year
  (Source – Carbon in Minnesota Trees and Woodland, University of Minnesota extension)

We need young, healthy, diverse and growing forests, not overmature timber, dead, diseased, and dying trees and certainly not burning forests.

If we don't agree upon that, then the timber industry will have limited opportunity to contribute to sustainable forestry as part of carbon sequestration and climate solutions.

WILDFIRES

Poor forest management does not create healthy forests, but instead negates the potentially positive benefits that would otherwise be achieved from sustainable forestry practices, and results in severe environmental consequences.

This is evident in the increase in wildfires in the U.S. and around the world. Global wildfire carbon dioxide emissions are at record highs. The Copernicus Atmosphere Monitoring Service of the EU found that burning forests released 1.3 gigatons of carbon dioxide last month alone. The highest since the organization began measurements in 2003. The U.S. was a leading contributor. Scientists are concerned that areas with dense vegetation -including many of our National Forests - are becoming a source rather than a sink of greenhouse gases.

A recent study, that the US Forest Service participated in, acknowledged that a warming climate has extended the wildfire season for obvious reasons. However, the study found that climate change accounts for just 14% of the influence on more destructive wildfires, while noting that live fuel was the largest factor, accounting for 53%.

Major portions of the hazardous fuels are smaller diameter understory that has minimal commercial value or use. However, don't interpret that to suggest that is the only live fuel removal necessary to reduce wildfire incidents. In fact, the number of stems per acre in many of the U.S. Forest Service high danger areas is over 4-5 times the density that silvicultural standards would recognize for heathy forests. Hazardous fuels and density reductions, including commercial harvesting, are necessary to comprehensively address the threat. Limiting the effort to only one segment will not effectively address or resolve the problem.

Utilization of otherwise unmerchantable timber is necessary in order to economically harvest this timber. Fortunately, multiple companies have developed processes to use unmerchantable forest-based feedstock and biomass to produce renewable biofuels that will offset fossil fuels. The only impediment to implementing this technology is the EPA Office of Air and Radiation misinterpretation of the Renewable Fuel Standard, RIN eligible, feedstock definition. Resolving this issue is critical to establishing the necessary markets to utilize this otherwise unmerchantable resource. In many cases it would also

create D3 and D7 Renewable Fuel products that have otherwise been unrealized in meeting the Congressional Intent of the Renewable Fuel Standard.

I've worked on wildfires, in fact my son is a wildland firefighter. Fire science is relatively simple. Fire requires three elements to occur – oxygen, fuel, and an ignition source. Removing oxygen from the environment is not an option for obvious reasons. Quite often the ignition source for wildfires is lightening, which is not controllable. The only manageable variable is the fuel source, and as noted in the previously referenced study, live fuel is the largest contributing factor to increased wildfire severity, size, and frequency. Unless we address the fuel loads in the forests, improving forest health and mitigating wildfires will not succeed.

Last May I had the opportunity to fly over and survey the aftermath of the wildfires in California. A video of the helicopter survey was produced and is included in my full testimony for the Congressional Record. If that video does not initiate an honest science-based dialogue to develop a new national policy on forest management, wildfire mitigation, timber salvage and restoration, nothing will.

CONCLUSION

Sustainable Forestry, practiced and performed by the American timber and forest products industry, is part of the solution in meeting the objectives of climate initiatives. However, it is entirely dependent on the rural jobs that the timber and forest products industries provide.

The American timber and forest products industry is prepared to be a partner in creating rural agricultural jobs that will also provide the tools to address climate issues, reduce wildfires, produce renewable green fuels to offset fossil fuels and "contribute to the prosperity of the nation".

American Loggers Council Wildfire Survey Concludes A New National Policy And Strategy Is Necessary To Reduce Wildfires

The United States, particularly federal forest management agencies, knows how to reduce the ever increasing, more severe and larger wildfires.

These litigants have weaponized well intended safeguards such as the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) as part of an obstructive and delaying strategy designed to impede forest management.

GILBERT, MINN. (PRWEB) SEPTEMBER 06, 2021

The United States, particularly federal forest management agencies, knows how to reduce the ever increasing, more severe and larger wildfires. Other public and private land managers and owners are already doing it with more positive results than the federal efforts. The only difference is their forest management approaches.

The federal land management agencies have professional foresters that recognize the problem and know the solution. Yet their hands are tied by bureaucratic processes and overly burdensome regulations. When they do complete the entire process and attempt to implement the land treatment prescription they face regular litigation to block or stall the land management effort, which results in perpetual delays rendering the objectives

unrealized. These litigants have weaponized well intended safeguards such as the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) as part of an obstructive and delaying strategy designed to impede forest management. These obstructionist tactics directly contribute to unhealthy forests subject to disease, invasive species, mortality and wildfire.

The results are demonstrated in the video below that highlights the aftermath of millions of acres of land and timber destroyed. The United States needs a new wildfire mitigation strategy based on scientifically supported silvicultural practices including; active forest management; salvage; and restoration.

Video Link to Wildfire Survey (copy and paste into browser)
https://m.youtube.com/watch?v=MLzGGxYOoFA

American Loggers Council

National Priority Issues
Briefing Paper

The American Loggers Council is the National Voice of Loggers representing 30 timber industry state associations.

The American Timber industry is a key component of the Biden Administrations "Build Back Better" post pandemic economic recovery and Climate Change Initiatives.

A healthy forest is dependent on a healthy forest products industry. Based on that premise, the following priority issues are presented for support from the Biden Administration.

American Loggers Council National Priorities

The Timber Industry's Role in Climate Change Mitigation

Sustainably managed forests, based on established silvicultural science, are the most readily available source of carbon sequestration and must be a key element of mitigating climate change. This focus and practice has been supported by the World Economic Forum Trillion Tree Initiative. Forests are carbon sinks, absorbing carbon and storing it well beyond the lifecycle of the trees, if managed, harvested and converted to forest based products. However, unmanaged forests are susceptible to mortality, disease, and fire, which all contribute to the release of carbon stored in the trees and actually creates a carbon source.

Forests are a renewable resource that provides environmental, economic, recreational and habitat benefits to society.

Forest Management is the key to capitalizing on the multiple benefits of healthy forests. From carbon sequestration to reducing wildfires. These efforts are mutually beneficial and can co-exist. The one or the other net sum zero philosophy is unsubstantiated. In fact, a recent finding that the US Forest Service participated in acknowledged that a warming climate has extended the wildfire season for obvious reasons. However, the study found that climate change accounts for just 14 percent of the influence on more destructive wildfires, while noting that live fuel was the largest factor, accounting for 53 percent. In order to address the primary contributor to extreme wildfires, fuels reduction through forest management must be practiced.

Forest restoration must be a priority of any sincere science-based climate change strategy.

Accepting the timber and forest products industry as a partner in addressing Climate Change will enable a comprehensive effort to collectively work together to accomplish this objective.

Biomass Carbon Neutrality and Renewable Energy Recognition

The United States is the only developed country in the world that does not recognize forest based biomass as a carbon neutral renewable resource. This impedes the development and utilization of forest based biomass feedstock as a source for the production of bio-crude, bio-char, bio-fuel, and wood pellets.

As an example, the Renewable Fuel Standard (RFS), as Congressionally developed and intended, includes a number of categories. However, D-3 and D-7 categories have never been produced or recognized. The single impediment to this is the EPA misinterpretation of eligible biomass feedstock. The EPA's determination is contrary to all publicly and privately accepted biomass source standards. In fact, the USDA has advised the EPA of this contradiction and provided expertise in an effort to correct this discrepancy. Until this is resolved, hundreds of millions of dollars in investment remains sidelined and critical unmerchantable timber (hazardous fuels) markets remain undeveloped.

If and when this issue is resolved, forest based biomass feedstock can be utilized to produce renewable bio-crude / bio-fuel and reduce fossil fuel use.

Timber Industry Workforce Development

Workforce development is an issue impacting and delaying the post-pandemic economic recovery. The situation is similar within the timber industry. It is further compounded by the aging workforce, projected retirements (14% over the next 8 years), lack of interest or knowledge by young entry level prospective employees, and competitiveness.

One of the traditional and historically typical workforce pipelines for the rural jobs has been generational family transitional experience. This is similar to the family farm situation. Based on this multigenerational workforce development path, family farms have been permitted to incorporate family members ages 16 and 17 in the operation (mechanized equipment) of the family farming business. The timber industry is in a similar position and has been promoting an identical allowance through the Future Logging Careers Act legislation. A copy of the legislation is attached and has bi-partisan sponsorship this year.

The American Loggers Council requests support from the White House on this legislation.

Timber Industry Transportation Challenges

The logistical transportation challenges of the economic supply chain are affecting all industry sectors. Timber transport capacity is no exception.

However, improvements is efficiency can increase capacity within the limited resources. A simple no cost opportunity to increase capacity, reduce truck trips, reduce fuel consumption, reduce carbon emissions and improve safety has been introduced in the House of Representatives "Safe Routes Act of 2021" (H.R. 2213), with bi-partisan support.

Additionally, consideration to incorporate legislation, as established by precedent in Wisconsin (attached) and other states, to grandfather local / state road systems that are being transferred into the Interstate System, to maintain access and the weight limits as previously permitted, must be authorized. Loss of these routes will increase truck trips, fuel consumption, miles transited, carbon emissions and transfer semi-truck traffic onto less safe rural routes. Maintaining and continuing the weight limits on these roadways does not change what they were subject to previously.

There is precedent for another "targeted" option of identifying and designating priority corridors within each state that will address high priority transportation routes. Attached is legislation that was passed in 2015 allowing a 23 mile corridor in Minnesota to access the federal Interstate System with logging trucks. This authorization removed logging trucks from downtown cobblestone roads in Duluth, MN and took them out of residential / school zones.

Federal Timber Availability

Forest management is dependent upon a stable supply chain infrastructure, including timber harvesters, timber haulers and end product mills. The loss of any component compromises the entire process.

In many regions, federal timber lands are the primary source of timber for mills. A loss or reduction in federal timber availability results in the closure of mills in these areas, which consequently impacts and reduces logging capacity and therefore undermines the forest management objectives of public and private land management interests. It is a finely balanced inter-dependent system.

However, in situations where any sector of the process is not stable or lost, it becomes a self-perpetuating downward spiral of collapse. This is evident in the USFS decision to reduce timber sale volume in the Black Hills of South Dakota, which directly contributed to the closure of a mill in Hill City that had been in operation for over 50 years. Twelve logging operations supplied this mill. Now, when the USFS decides to resume timber harvesting operations at increased volume, there will not be a mill or loggers to utilize the timber, meaning the forest management objectives of the USFS will not be accomplished.

Conclusion

The American timber industry is vital to maintaining healthy forests, which need to be a key component of the Biden Administration Climate Initiatives. Increased active forest management on federal lands (it is already being conducted on other public and private lands) is necessary to ensuring the forests can contribute positively to this effort.

Forest management is dependent on a strong and stable timber and forest products industry. The issues outlined can contribute to the stabilization and post-pandemic recovery of the timber industry. Congressional inclusion of these issues, or Executive action, will provide an unmatched return on investment in the American environment and economy.

House of Representatives
Committee On Small Business
Subcommittee on Underserved, Agricultural, and Rural Development
Hearing On:
"Sustainable Forestry's Role In Climate Solutions"
Scott Dane, American Loggers Council Testimony

[INSIDESOURCES]

[IS] OPINIONS ■ Energy (https://insidesources.com/category/energy/)

Biomass Energy From Forests Can Be Sustainable and Carbon Neutral

Posted to Energy (https://insidesources.com/category/energy/) July 12, 2021 by Brent Sohngen (https://insidesources.com/author/brentsohngen/)

The issue of carbon neutrality for wood-based bioenergy just won't go away. In recent months, Politico, The New York Times, and CNN all have run high-level stories that take the Europeans to task for using wood pellets from the U.S. South because of concerns that wood-based biomass is not carbon neutral.

The problem with all these stories is creating biomass energy from forests in fact is carbon neutral. There may be equity issues, as CNN raised, or local problems with the implementation of sustainable forest practices, but economic analyses consistently show that wood-based bioenergy is not only carbon neutral, but it reduces the net climate impact of household electricity consumption when it substitutes for fossil-based electricity.

Many scientists don't want trees planted and harvested for anything, let alone energy. So they argue that wood bioenergy isn't carbon-neutral at all. This was basically the argument of a group of 500 scientists who wrote a public letter to several heads of state last winter (https://www.dropbox.com/s/hdmmcnd0d1d2lq5/Scientist%20Letter%20to%20Biden%2C%20von%20der%20...eyen%2C%20Michel%2C%20Suga%20%26%20Moon%20%20Re.pdf=0). Many of the arguments made against wood bioenergy – high emissions when trees are harvested and a carbon debt – sound compelling, but fall apart when contrasted with reality.

Consider the "carbon debt" idea, which says that after trees are cut and burned for electricity, it takes a while for trees to regrow, and in the meantime, their emissions cause the same kinds of damages as the fossil energy they replace. Anybody can see that burning trees releases carbon. But this carbon has been stored in those trees for 30 to 50 years, not millions of years like coal or natural gas. Furthermore, trees regrow fairly quickly.

Look, if we were harvesting old-growth trees and converting them to electricity, then biomass-based electricity would be a problem. We would be taking carbon that had been cycling in a natural system for perhaps thousands of years, and burning it up. Trees that replace those old-growth stands would take hundreds to thousands of years to rebuild that carbon. More importantly, we would be losing amazing natural assets that host incredible biodiversity.

Yes, society has the capacity to do something as stupid as that, but in this case, it turns out we aren't that dumb. Most trees burned for electricity today were planted or grown specifically for the purpose of harvesting them. This idea is really hard for people – even Ivy League economists – to get their heads around, but the truth of market economics is that when trees are valuable, people plant them as an investment.

U.S. Forest Service estimates that since the 1920s, foresters have planted 137 million acres of trees. Today there are 68 million acres of planted forests standing in the U.S., which is 13 percent of all timberland. Planted forests are concentrated in the South, where they represent 23 percent of all timberland. Most of this planted forest, 85 percent of it, lies on private land and is driven by markets. Since the early 1900s, timber prices have risen 3-4 percent per year, and foresters have gained more than 30 percent in yield by planting trees rather than relying on natural regeneration. Indeed, there is a hefty economic incentive to plant forests.

Most of the carbon emitted when wood is burned for electricity is taken from forests that were managed to be harvested eventually. This means most of the carbon was removed from the atmosphere relatively recently, and as a direct result of human interventions.

Because of the way we have managed our forests in the U.S., they have been storing increasing amounts of carbon in trees for over a century. We liquidated large stocks of old-growth forests in the last century, but over that period the U.S. has increased the total CO_2 stored in forests by 43 billion tons. And since 1990, the U.S. has sequestered an additional 16.6 billion tons of CO_2 in forests. This fact is true for the globe as well. From 1900 to the present, society shifted nearly two billion acres from forest to agriculture, releasing massive amounts of carbon, but amazingly, forest regrowth has more than offset these emissions.

Despite all we have thrown at them – old-growth harvests, deforestation, and invasive species– trees are cooling the earth at a greater clip year by year. In the U.S., around 20 percent of the current carbon in forests has been put there in the last 30 years, and up to 50 percent in the last 100 years. A critically important reason for this is that people have invested in trees by planting and managing them specifically for the products they can produce. When we use trees today, we don't create a carbon debt for the future, we instead use a credit from the past.

The best way to pay this credit forward is to create market incentives that encourage foresters to replenish the forests they use. Replanting trees will happen with markets as demand for wood increases. Many people mistakenly worry that the rising demand for wood will lead to only one thing – falling trees. But this view ignores the last two centuries of forest history where we have continuously increased the area of planted forests to produce the things we value – houses, paper, furniture, and now electricity.

It's simple economics really, anything that makes wood harvesting more profitable leads to increased investments in growing wood. People and companies invest in things that are valuable, and investors have planted trees all over the world just to make a profit. There are nearly 300 million acres of plantations globally, planted expressly for the purposes of cutting them down for products. These trees are providing carbon storage today, and a sustainable supply of wood products now and in the future. These plantations are critical for the environment because they alleviate pressure on natural forests.

Concerns about the carbon neutrality of wood bioenergy are based on an old model of forestry liquidation that did exist in the past. But across a rapidly increasing area of the world's forest estate, quietly and relentlessly, markets have driven us to a renewable forestry sector. Renewable forestry is already evident in Europe, the U.S., China, New Zealand, Australia, Japan, South Korea, and elsewhere. It is wrong environmentally and economically to ignore this and to conflate the historical liquidation model with the renewable management model that today already does deliver carbon-neutral biomass energy.

About the Author

Brent Sohngen (https://insidesources.com/author/brentsohngen/)

Brent Sohngen is professor of environmental and resource economics at the Ohio State University. He wrote this for InsideSources.com.

More from Inside Sources

Another Viewpoint/Answering the Question: 'Is biomass a climate solution?'

BY ROB RILEY, WILLIAM BELL, DANA DORAN

The Professional Logging Contractors of Maine, the Maine Pellet Fuels Association, and the Northern Forest Center read an Aug. 13 column, Energy Matters – Is biomass a climate solution? in the Lewiston Sun Journal and Franklin Journal with dismay, and once again we find ourselves wondering why those who claim concern over climate change would focus their attention on questioning a proven and critical piece of any solution to that issue.

The writers of the editorial clearly conclude the answer to their question is a resounding "no" when in fact the clear answer is, "biomass is part of the climate solution," and a critical part.

What is biomass? In layman's terms, it is largely wood waste or byproducts: sawdust from sawmills, wood chips from limbs and tops of trees harvested for lumber, and low-grade unhealthy trees harvested to allow healthier trees to grow in their place. As these byproducts decay, carbon is released into the atmosphere, but trees grow back and recapture carbon – something fossil fuels cannot do. And so, burning biomass for heat or energy – especially

when it is used in place of a fossil fuel – is capturing value from this resource versus letting it decay for no gain at all.

The United Nations Intergovernmental Panel on Climate Change (IPCC), widely considered the world's leading authority on climate science, has consistently confirmed the important role of forest products and bioenergy in combating climate change and carbon emissions. According to the IPCC, every pathway to keeping temperature increases under 1.5 degrees Celsius includes sustainable forestry and wood biomass.

The European Commission, the executive branch of the European Union agrees, and the EU and the United Kingdom are vigorously pursuing biomass energy as part of their region's climate solution.

The U.S. has been slow to follow suit, but recently Congress – with support from Maine's Congressional Delegation – passed key portions of "The BTU Act" in the bipartisan Consolidated Appropriations Act of 2021. This commonsense legislation finally provides Maine homeowners with the opportunity to install highly efficient modern wood heating appliances with the same federal tax credit (previously 30 percent, a federal income tax credit of 26 percent commences with systems purchased in 2021 and phases down to 22 percent in 2022 and 2023.) afforded to other renewable technologies such as solar, wind, fuel cells, and geothermal heating.

Maine – which is the most forested yet one of the most fossil fuel-dependent states in the U.S. – has an abundance of low-grade wood that is ideal for creating sustainable energy without depleting our forest resource. This energy

market is also critical for proper management of forest health, allowing low-grade wood to be cost-effectively removed where needed to improve the overall health of the forest.

We feel it is worth noting that one of the authors of the Aug. 13 editorial works at the University of Maine at Farmington, which has a combined heat and power (CHP) wood chip boiler on its campus that was designed to reduce the campus fossil fuel needs by 390,000 gallons annually. Many other colleges, schools, institutions, and businesses have done the same, and with fossil fuel prices on the rise, the financial winds of the energy market are beginning to shift in favor of biomass once again.

Nearly two-thirds of Maine households use fuel oil as their primary energy source for home heating, a larger share than any other state. Hundreds of millions of dollars associated with this fuel leave Maine entirely each year. By contrast, wood energy systems provide important bulk demand for wood chips and pellets from Maine's forests, opportunities for local heating equipment firms, employment for Maine loggers and truckers, and public examples of the workability – particularly cost savings – of modern wood heating. They also reduce carbon emissions by over 50% when substituted for fuel oil, propane, or natural gas. The factors described above give Maine a solid foundation on which to build the wood energy sector in the years to come to achieve our state climate goals and keep our energy dollars circulating in Maine.

117TH CONGRESS
1ST SESSION

S. _____

To exempt certain 16- and 17-year-old individuals employed in logging operations from child labor laws.

IN THE SENATE OF THE UNITED STATES

Mr. RISCH (for himself, Mr. KING, Mr. SCOTT of South Carolina, Ms. BALDWIN, Ms. COLLINS, Mr. CORNYN, and Mr. CRAPO) introduced the following bill; which was read twice and referred to the Committee on

---

A BILL

To exempt certain 16- and 17-year-old individuals employed in logging operations from child labor laws.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Future Logging Careers Act".

SEC. 2. CHILD LABOR LAW EXEMPTIONS FOR LOGGING OPERATIONS.

The Fair Labor Standards Act of 1938 (29 U.S.C. 201 et seq.) is amended—

(1) in section 3 (29 U.S.C. 203), by adding at the end the following:

"(z) 'Logging operation'—

"(1) means—

"(A) a mechanized operation;

"(B) the bucking or converting of timber into logs, poles, ties, bolts, pulpwood, chemical wood, excelsior wood, cordwood, fence posts, or similar products;

"(C) the collecting, skidding, yarding, loading, transporting, or unloading of such products in connection with the activities described in this paragraph;

"(D) the constructing, repairing, or maintaining of—

"(i) roads or camps used in connection with the activities described in this paragraph; or

"(ii) machinery or equipment used in the activities described in this paragraph; or

"(E) any other work performed in connection with the activities described in this paragraph; and

"(2) does not include the manual use of chainsaws to fell or process timber or the use of cable skidders to bring the timber to the landing.

"(aa) 'Mechanized operation'—

"(1) means the felling, skidding, yarding, loading, or processing of timber by equipment other than manually operated chainsaws or cable skidders; and

"(2) includes the use of whole tree processors, cut-to-length processors, stroke boom delimbers, wheeled and track feller-bunchers, pull-through delimbers, wheeled and track forwarders, chippers, grinders, mechanical debarkers, wheeled and track grapple skidders, yarders, bulldozers, excavators, and log loaders."; and

(2) in section 13(c) (29 U.S.C. 213(c)), by adding at the end the following:

"(8) The provisions of section 12 relating to child labor shall apply to an employee who is 16 or 17 years old employed in a logging operation in an occupation that the Secretary of Labor finds and declares to be particularly hazardous for the employment of children ages 16 or 17, except where such employee is employed by his parent or by a person standing in the place of his parent in a logging operation owned or operated by such parent or person.".

Subject: Interstate Exemption
From: Henry Schienebeck <henry@gltpa.org>
Date: 7/11/2021, 10:32 AM
To: "Scott Dane (scott.dane@amloggers.com)" <scott.dane@amloggers.com>

Scott,
This is the language that became law in the FY 15 Omnibus giving WI log haulers the exemption on Hwy 41 in the Green Bay to Milwaukee corridor when it became an interstate.

``(j) Operation of Vehicles on Certain Other Wisconsin Highways.--If any segment of the United States Route 41 corridor, as described in section 1105(c)(57) of the Intermodal Surface Transportation Efficiency Act of 1991, is designated as a route on the Interstate System, a vehicle that could operate legally on that segment before the date of such designation may continue to operate on that segment, without regard to any requirement under subsection (a).

Henry Schienebeck
Great Lakes Timber Professionals Association
"Sustaining Forests, Enhancing Life"
Rhinelander WI 54501
W-715-282-7988
C-715-661-1130

This week, FRA met with staff from the Office of Senator Richard Burr (R-NC) to discuss a path forward for grandfathering state roads in North Carolina that are slated to become interstate highways in the near future. As we have mentioned in previous updates, legislating a grandfather clause for these routes is critical as trucks now operating in the state may haul at 90,000 pounds on five axles. If no action is taken, the weight limit on these arteries will drop to 80,000 pounds on five axles.

In our meeting, we learned that the Senate Environment and Public Works Committee-passed component of the surface transportation reauthorization bill does include a provision grandfathering weight limits on these roads—most of which serve pulp and paper and other consuming mills in the state. The prospects of this provision becoming law are tried directly to the fate of the bipartisan infrastructure spending package that was announced last month. If that package moves forward, the surface transportation bill will likely move with it, including this grandfathering clause. If the bipartisan infrastructure negotiations in the Senate fall apart, we are likely looking at a reconciliation process in which many smaller provisions—like the NC state road weigh limit clause—will likely be dropped. The situation is fluid, and we will keep you apprised of our progress.

One Hundred Fourteenth Congress of the United States of America

AT THE FIRST SESSION

Begun and held at the city of Washington on Tuesday, the sixth day of January, two thousand and fifteen

An Act

To Authorize funds for Federal-aid highway safety programs, and transit programs, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. **SHORT TITLE; TABLE OF CONTENTS.**

(a) SHORT TITLE.—This Act may be cited as the "Fixing America's Surface Transportation Act" or the "FAST Act".

Page 263 "(q) CERTAIN LOGGING VEHICLES IN THE STATE OF MINNESOTA.—

"(1) IN GENERAL.—The Secretary shall waive, with respect to a covered logging vehicle, the application of any vehicle weight limit established under

Page 264 this section.

"(2) COVERED LOGGING VEHICLE DEFINED.—In this subsection, the term 'covered logging vehicle' means a vehicle that—

"(A) is transporting raw or unfinished products, including logs, pulpwood, biomass, or wood chips;

"(B) has a gross vehicle weight of not more than 99,000 pounds;

"(C) has not less than 6 axles; and

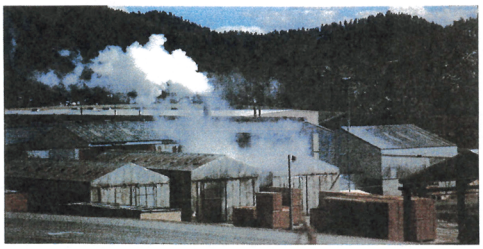
"(D) is operating on a segment of Interstate Route 35 in the State of Minnesota from mile marker 235.4 to mile marker 259.552.

https://rapidcityjournal.com/business/local/hill-city-saw-mill-closes-eliminating-120-jobs/article_7d329c67-85ef-5265-9992-f34cdc545cf1.html

ALERT FEATURED

Hill City saw mill closes, eliminating 120 jobs

Nathan Thompson
Mar 22, 2021



Steam billows Monday out of facilities at Neiman Enterprises' Rushmore Forest Products in Hill City. Neiman Enterprises announced Monday the saw mill will permanently close, eliminating 120 jobs and 12 contract crews.

Grace Pritchett Journal staff

Nathan Thompson

Neiman Enterprises announced Monday the company will permanently close its saw mill in Hill City, eliminating 120 jobs and 12 contract crews, citing a reduction in timber available in the Black Hills National Forest.

Jim Neiman, president and CEO of Neiman Enterprises, said the company notified employees Monday afternoon.

"If given the opportunity to purchase timber to keep the mill running, we would have done that," Neiman said in a press release. "Keeping the Hill City location running would be in the best interest of the forest and our communities over the long term."

The Hill City saw mill has been in operation for 53 years, according to the news release. Neiman Enterprises purchased the property in 1998 from Continental Lumber and renamed it Rushmore Forest Products. The mill was converted from dimensional lumber to boards and produced 60 million board-feet of ponderosa pine boards and pattern boards, the news release said.

"I never thought I would see the day when we would be out of options to keep all our facilities running," Neiman said. "Lumber markets have been exceptionally high for the past year and have broken all-time record highs. The problem here is purely a lack of timber available for purchase in the Black Hills, and we rely on the Forest Service for approximately 80% of our supply."

The Neiman family companies has been operating in the Black Hills since 1936. The company has facilities in Spearfish; Hulett, Wyoming; Montrose, Colorado; and Gilchrist, Oregon.

In 2013, Rushmore Forest Products played a role in stopping the spread of **mountain pine beetles by processing the diseased timber**.

"Waging those battles took all the forest products companies in the Black Hills to help save our forests. We have just lost some of our ability to win those battles," Ben Wudtke, executive director of Black Hills Forest Resource Association, said in a statement.

Rushmore Forest Products also helped **salvage nearly 5,000 truckloads of timber** after a June 2018 tornado and August 2018 fire ravaged portions of Wind Cave National Park, Custer State Park and areas of the Black Hills National Forest.

"Our family has been committed to doing what's right for our employees and the forests and communities of the Black Hills, and we remain steadfast in that commitment going forward," Marcus Neiman, vice president of Neiman Enterprises, said.

Contact Nathan Thompson at **nathan.thompson@rapidcityjournal.com**.

Nathan Thompson
Assistant Managing Editor

American Loggers Council Wildfire Survey Concludes A New National Policy And Strategy Is Necessary To Reduce Wildfires

The United States, particularly federal forest management agencies, knows how to reduce the ever increasing, more severe and larger wildfires.

GILBERT, MINN. (PRWEB) SEPTEMBER 06, 2021

The United States, particularly federal forest management agencies, knows how to reduce the ever increasing, more severe and larger wildfires. Other public and private land managers and owners are already doing it with more positive results than the federal efforts. The only difference is their forest management approaches.

The federal land management agencies have professional foresters that recognize the problem and know the solution. Yet their hands are tied by bureaucratic processes and overly burdensome regulations. When they do complete the entire process and attempt to implement the land treatment prescription they face regular litigation to block or stall the land management effort, which results in perpetual delays rendering the objectives unrealized. These litigants have weaponized well intended safeguards such as the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) as part of an obstructive and delaying strategy designed to impede forest management. These obstructionist tactics directly contribute to unhealthy forests subject to disease, invasive species, mortality and wildfire.

The results are demonstrated in the video below that highlights the aftermath of millions of acres of land and timber destroyed. The United States needs a new wildfire mitigation strategy based on scientifically supported silvicultural practices including; active forest management;

salvage; and restoration.

Click Here to View American Loggers Wildfire Aftermath Helicopter Tour Video

Share article on social media or email:

View article via:

PDF PRINT

> These litigants have weaponized well intended safeguards such as the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) as part of an obstructive and delaying strategy designed to impede forest management.

Contact Author

SCOTT DANE

The Honorable Jared Golden
Chairman
Subcommittee on Underserved, Agricultural,
and Rural Business Development
Committee on Small Business
United States House of Representatives
Washington, D.C. 20510

The Honorable Jim Hagedorn
Ranking Member
Subcommittee on Underserved, Agricultural,
and Rural Business Development
Committee on Small Business
United States House of Representatives
Washington, D.C. 20510

Dear Chairman Golden, Ranking Member Hagedorn, and Members of the Committee,

On behalf of the Outdoor Recreation Roundtable (ORR), thank you for bringing attention to the economic and environmental opportunities provided by the forestry sector by holding last week's hearing on sustainable forestry's role in climate solutions. We appreciate the recognition in your memo that outdoor recreation offers major economic, environmental, and social benefits in forests around the United States. We are pleased to provide the perspective of the outdoor recreation industry and share strategies and opportunities to effectively utilize forests for the benefit of communities around the country, particularly in rural America.

ORR is the nation's leading coalition of outdoor recreation trade associations – made up of 34 national members, as well as other nonprofit organizations and business entities — serving more than 110,000 businesses. According to the most recent data from the Bureau of Economic Analysis released last year, the recreation industry generated $788 billion in economic output, accounted for 2.1 percent of GDP and 5.2 million American jobs and was growing faster than the economy as a whole in every indicator.

COVID-19 and the desire for safe, family-friendly activities during the pandemic made 2020 the biggest year for outdoor recreation participation and sales in American history. A survey published in May 2020 found that 81 percent of Americans had already spent time outside at that point in the pandemic, with 32.5 percent turning to outdoor recreation for the first time. 8.1 million more Americans hiked in 2020 vs. 2019 (a 16.3 percent increase), and the total percentage of Americans who participate in outdoor recreation rose from the previous ten years. Many sectors within the industry saw record participation numbers in the past year: freshwater fishing added 3.4 million participants in 2020, shipments of RVs reached an all-time high in the first quarter of 2021, new model powersports sales increased 40 percent in 2020 over 2019 levels, and retail unit sales of new powerboats in the U.S. increased by 12 percent in 2020 over 2019. These figures capture our nation's recognition over the past year that outdoor recreation provides significant physical health, mental health, and community benefits. Importantly, new participants in outdoor recreation are younger, predominantly female, and more diverse.

With statistics like these in mind, many communities around the United States have recognized that investing in outdoor recreation infrastructure in and around national, state, and local forests provides a resilient economic development strategy that benefits locals and visitors alike. For instance, the Pennsylvania Wilds Center for Entrepreneurship promotes outdoor recreation, conservation, and economic development in a two-million acre region of public land in northern Pennsylvania that had experienced high unemployment and population loss after a decline in timbering, mining and oil and gas drilling. By focusing on outdoor recreation and conservation

OUTDOOR RECREATION ROUNDTABLE

values through a unique intergovernmental cooperative agreement, the region now enjoys $1.8 billion in annual spending and over 8 million day-trip visitors who support an entrepreneurial ecosystem of 300+ private-sector partners involved in the outdoor recreation industry. Or consider the Northern Forest Center, which aims to create rural vibrancy by connecting people to the 30-million acre Northern Forest stretching across Maine, New Hampshire, Vermont, and New York. Outdoor recreation is at the core of their rural economic development strategy, and through strategies like a destination development grant program and mountain biking trail investments, they have managed to sustain more than 7,200 jobs in forest-based businesses and tourism and leverage over $233 million in funds for the region.

As these examples demonstrate, it is possible to address the most acute impacts of climate change while enhancing and sustaining economies, and outdoor recreation investments in forests provide a clear example. Through federal investments like the Recreation Economy for Rural Communities (RERC) program or last year's historic passage of the Great American Outdoors Act, Congress is helping create more opportunities for communities to thrive while addressing climate change. Reauthorization and expansion of RERC, in particular, will support urban and rural communities in making best use of their natural resource assets for environmental and economic benefit.

We hope the House Committee on Small Business in the 117th Congress will see us as a key partner in identifying more opportunities for outdoor recreation infrastructure investment going forward.

Sincerely,

Jessica Turner
Executive Director

Congress of the United States
Washington, DC 20515

April 7, 2021

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Avenue, SW
Washington, DC 20250

Dear Administrator Regan and Secretary Vilsack,

We write in regard to an important issue that affects the future vitality of Maine's economy, the strength of our state's working forests, and the ability to further reduce carbon dioxide emissions by producing biofuels from sustainably harvested low-grade wood. We ask for your attention to this matter and request a meeting to discuss steps to ensure that Maine wood harvest residuals and pre-commercial thinnings qualify as renewable biomass under the Renewable Fuel Standard (RFS).

As you know, the RFS was drafted and signed into law with the intent to reduce our country's reliance on fossil fuels and cut back on carbon dioxide emissions. Under the RFS, several tree, crop, or biowaste uses are defined as "renewable biomass," including "(iv) Slash and pre-commercial thinnings that are from non-federal forestlands." Utilizing slash and pre-commercial thinnings from Maine to develop biofuel—materials that are routinely produced in our standard forestry practices—will help meet this goal of carbon reduction as well as provide a market for these waste products.

Forestry experts agree that, as defined by EPA, most of the wood currently harvested in Maine qualifies as slash or pre-commercial thinnings. With regard to pre-commercial thinnings, most low-grade wood harvested as part of forest management activities in Maine are trees removed to reduce stocking to concentrate growth on more desirable, healthy trees. This practice qualifies these materials as "pre-commercial thinnings" under the RFS and should be recognized as such. Further EPA defines slash as "the residue, including treetops, branches, and bark, left on the ground after logging or accumulating as a result of a storm, fire, delimbing, or other similar disturbance, " which is also prevalent in typical Maine forest practices. Our offices have raised these issues and provided a study detailing a clear analysis of Maine harvest practices to EPA in the past to clarify these points, and we have attached an updated study to this letter again.

Without clarity from EPA, potential biofuel producers are turning away from Maine and instead investing in states with less sustainable forest harvesting practices, and whose plantation style management approaches more easily fit the EPA's definition of "renewable biomass." Maine foresters need EPA to provide clear guidance that their products qualify as slash and pre-commercial thinnings under the RFS.

We urge you to review the attached study to help your agencies determine that these forest products qualify as "renewable biomass" under the RFS, and offer clarity to a changing industry that is working with manufacturers to create a sustainable biomass based fuel industry that will help reduce our country's fossil fuel dependence. We look forward to the opportunity to meet and speak directly with you both on this issue.

Thank you for your attention to this matter.

Sincerely,

SUSAN M. COLLINS
United States Senator

ANGUS S. KING, JR.
United States Senator

CHELLIE PINGREE
Member of Congress

JARED GOLDEN
Member of Congress

Cc: Robert Bonnie, Deputy Chief of Staff for Policy and Senior Advisor on Climate, U.S. Department of Agriculture;

Doug McKalip, Senior Advisor to the Secretary, U.S. Department of Agriculture.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

July 30, 2021

The Honorable Angus S. King, Jr.
United States Senate
Washington, D.C. 20510

Dear Senator King:

Thank you for your April 7, 2021 letter to Administrator Regan and Secretary Vilsack regarding the use of slash and pre-commercial thinnings under the Renewable Fuel Standard (RFS) program. The Administrator asked that I respond on his behalf.

We appreciate your concern on this issue and thank you for the information you provided on Maine forest harvesting practices. EPA is committed to implementing the RFS consistent with the Clean Air Act while simultaneously considering the well-being of our nation's forests. What we are trying to guard against – and what we believe Congress intended to prevent via the statutory language – is the harvesting of historic pulp wood forests and increased harvesting of trees from natural forests to make renewable fuel. Consistent with that understanding of Congress's intent, EPA's pathways for the production of renewable fuel from slash and pre-commercial thinnings are premised on the idea that these materials would be generated absent the RFS.

EPA recognizes, however, that location-specific conditions may affect whether certain wood feedstocks qualify as renewable biomass under the Clean Air Act and EPA's implementing regulations. Therefore, we review each facility's application to register slash and pre-commercial thinnings as a qualifying feedstock under the RFS on a case-by-case basis.

Based on the information in the White Paper you provided, EPA believes that thinnings harvested from dense overstocked even-age stands "in order for dominant stems to reach their commercial potential" could qualify as pre-commercial thinnings under the RFS, provided substantial stock remains in the stand to give meaning to the term thinnings. The White Paper describes the practice as "directed towards removing the suppressed understory to give the dominants more growth potential" and the management focus as "growing the dominant trees larger to sawtimber size." We understand that the purpose of entering the stand for this method is to remove the suppressed understory in order to improve tree spacing and concentrate growth on the more desirable trees within the age class, which is consistent with the definition of pre-commercial thinnings. Based on the description provided, this practice likely qualifies as an intermediate treatment because it is conducted before final harvest, and because the trees intended to eventually be merchantable timber are left in the stand to continue growing. Thus, the woody biomass resulting from the thinning of dense, overstocked, even-aged stands appears to qualify as pre-commercial thinnings.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Thomas Boylan in EPA's Office of Congressional and Intergovernmental Relations at boylan.thomas@epa.gov or at 202-564-1075.

Sincerely,

Joseph Goffman
Acting Assistant Administrator

April 12, 2021 (/news/safe-routes-act-hr-2213-of-2021)

Safe Routes Act, H.R. 2213 of 2021 (/news/safe-routes-act-hr-2213-of-2021)

"Great Lakes Timber Professionals Association (GLTPA) commends Congressman Gallagher for his persistence to create a safer environment for local communities and truck drivers with the re-introduction of the "Safe Routes Act, H.R. 2213" of 2021," stated GLTPA President Matt Jensen.

"The "Safe Routes Act, H.R. 2213" of 2021 provides drivers of product specific, specialized log trucks a choice of routes by allowing them access to the interstate highway system when available," he continued. When passed by Congress, the "Safe Routes Act, H.R. 2213" will allow drivers of state weight compliant log trucks the option of avoiding urban streets and highways where pedestrian activity is ongoing all hours of the day.

Log truck drivers throughout the nation are restricted, under certain conditions, from utilizing the interstate highway systems designed to transport heavy military equipment. This restriction forces drivers to travel on city, town, and rural haul routes. Being forced to secondary haul routes increases truck driver exposure to automobiles, bicyclists, and pedestrians. In addition to increased pedestrian exposure, driver hours of service are increased adding to driver fatigue which is something concerned safety groups say they would like to see lessened for drivers.

In addition to reducing driver hours and fatigue, the "Safe Routes Act, H.R. 2213" also reduces the number of "Vehicle Miles Traveled (VMT)". VMT is a measurement used to determine the number of projected accidents based on the number of vehicle miles traveled within a given time frame. Interstate routes are typically shorter and more efficient than secondary routes. As such, fewer miles traveled results in fewer projected accidents which is promoted by industry and safety advocates alike.

"The "Safe Routes Act, H.R. 2213" of 2021 is simplistic legislation which will have an enormous positive impact on safety for both pedestrians and log truck drivers nationwide," said Henry Schienebeck, GLTPA Executive Director. In addition to added safety, local routes will see a decrease in traffic which could lead to increased road life. Along with all the states who are members of the American Loggers Council and Forest Resources Association, Great Lakes Timber Professionals Association fully supports this narrowly focused yet meaningful safety legislation.

Source: Henry Schienebeck, Executive Director, Great Lakes Timber Professionals Association (https://files.constantcontact.com/b8a79b0c001/fd8a77c1-8a6b-4d47-8546-4739e72c6690.pdf)

(/individual-membership)

Peterbilt (/news/tag/Peterbilt) Safe Routes (/news/tag/Safe+Routes) Logging Equipment (/news/tag/Logging+Equipment) Wildfires (/news/tag/Wildfires) Team Safe Trucking (/news/tag/Team+Safe+Trucking) Rebate (/news/tag/Rebate) Biomass (/news/tag/Biomass) Tigercat (/news/tag/Tigercat) COVID-19 (/news/tag/COVID-19) Forest Fire Prevention (/news/tag/Forest+Fire+Prevention)

I

117TH CONGRESS
1ST SESSION

H. R. 2213

To amend title 23, United States Code, with respect to vehicle weight limitations for certain logging vehicles, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 26, 2021

Mr. GALLAGHER introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

---

A BILL

To amend title 23, United States Code, with respect to vehicle weight limitations for certain logging vehicles, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Safe Routes Act of 2021".

SEC. 2. VEHICLE WEIGHT EXEMPTIONS.

Section 127 of title 23, United States Code, is amended by adding at the end the following:

"(v) CERTAIN LOGGING VEHICLES.—

"(1) IN GENERAL.—The Secretary shall waive, with respect to a covered logging vehicle, the application of any vehicle weight limit established under this section.

"(2) COVERED LOGGING VEHICLE DEFINED.—In this subsection, the term 'covered logging vehicle' means a vehicle that—

"(A) is transporting raw or unfinished forest products, including logs, pulpwood, biomass, or wood chips;

"(B) is traveling a distance not greater than 150 air miles on the Interstate from origin to a storage or processing facility; and

"(C) meets State legal weight tolerances and vehicle configurations for transporting raw or unfinished forest products within the State boundaries in which the vehicle is operating.

"(3) APPLICATION OF WEIGHT TOLERANCES.—The waiver in this subsection shall only apply with respect to a State legal weight tolerance in effect on the date of enactment of this subsection.".

○

SFI-00001

Sustainable Forestry Initiative
Written Testimony
U.S. House Committee on Small Business
Subcommittee on Underserved, Agricultural, and Rural Business Development
Hearing on "Sustainable Forestry's Role in Climate Solutions"
October 6, 2021

The Sustainable Forestry Initiative Inc. (SFI) appreciates the Subcommittee's September 29 hearing on the important issue of the role of sustainable forestry in climate solutions. We further appreciate the opportunity to share our insights on this topic.

As an independent, non-profit organization, SFI collaborates with a diverse network across the U.S. and Canada to advance sustainability through forest-focused solutions. SFI is in a strong position to contribute to addressing climate change with forest solutions through its:

- **Scale**: 375 million acres are certified to the SFI Forest Management Standard across the U.S. and Canada (including 70 million acres in the U.S.), a mix of private and public forests.
- **Programs**: SFI provides forest certification standards, conservation research and collaboration, community engagement, and environmental education
- **Network**: SFI works with a diverse network committed to forest-based solutions, including forest landowners, manufacturers, brand owners, conservation groups, resource professionals, educators, local communities, Tribes and Indigenous Peoples, governments, and universities.

We offer the following considerations for the Subcommittee.

Forest certification has an important role to play in climate solutions.

We applaud the hearing memo for pointing to the assurances provided through forest certification standards such as SFI's. SFI recently announced its new (2022) forest certification standards. Given the increasing global impact of climate change, and increased understanding about the important role of forests, SFI developed a new **Climate Smart Forestry** objective focused on climate change mitigation and adaptation. The new objective requires Certified organizations to identify and address climate change risks to forests and forest operations and develop adaptation objectives and strategies. Certified organizations are also required to have a program to identify and address GHG emissions associated with forest operations within their operational control.

SFI-certified organizations include private companies, investment managers, state and county agencies, tribes, universities, conservation and community entities, and others. This means the reach of SFI's certification requirements is significant. Furthermore, all users of the SFI standards must undergo independent third-party verification of compliance to the standards – this verification mechanism offers a critical component to substantiate on-the-ground practices.

The requirements in our Climate Smart Forestry objective offer a model for federal policy. We encourage government support for and endorsement of forest certification, which result in practices on the ground that create climate resilient forests.

The use of wood products sourced from responsibly managed forests should be encouraged

The construction industry, responsible for 40% global GHG emissions, is looking towards the expanded use of mass timber to substantially lower embodied carbon in building materials. Architects, engineers

and contractors are seeking assurances that the increased use of wood has a positive impact on our environment and positively contributes to addressing climate change. Forest certification delivers this assurance, through the practices required in the SFI standards, the third-party verification, and the tracking mechanisms through the supply chain.

Numerous mass timber manufacturers are choosing to get certified to the SFI's Chain of Custody (CoC) Standard as a proof point to the environmental benefits of their wood products. While there is strong and growing demand in the marketplace, there is still the need for greater education and outreach to architects, engineers, and builders about forest management in general and forest certification as a proof point and a valuable tool in mitigating the effects of climate change.

SFI is providing a grant to the University of Miami School of Architecture to help architecture students understand the climate-related benefits of choosing building materials procured from sustainably managed forests. The grant supports field-based experiences for architecture students meeting with land and water management leaders in the U.S. Southeast to learn about the importance of sustainable forestry specific to mitigating climate change, conserving habitats, and providing clean water. Students will also gain an understanding of the sustainable nature of forest-based supply chains and discuss the emerging influence of forest products, such as mass timber, in building design and in support of healthy, equitable, lower carbon communities.

Federal policy should support outreach and incentivization efforts, including workshops, grants, and other mechanisms to reach this important market. It is critical for government to point to the benefits of sourcing wood products from certified forests.

We must create green career pathways to build a sustainable workforce.

A huge opportunity exists to make gains in charting a more equitable and sustainable path forward for nature-based solutions. Growing a young person's pathway in a green career starts with first-time experience, and is built through other important experiences like mentorship, skills development and networking opportunities. We must work together to support education, training and employment opportunities, ensuring we include women, rural residents, minorities, Indigenous people, and other underrepresented populations in the forest and conservation sectors.

SFI is in a strong position to provide solutions to address this need.

SFI responds to local needs across the U.S. and Canada through 34 **SFI Implementation Committees** (SICs) at the state, provincial, and regional levels. These committees work with local businesses, universities, government agencies, landowner groups, conservation groups, and many others to broaden the practice of responsible forestry and achieve on-the-ground progress. These SICs establish criteria and identify delivery mechanisms for logger and forester training to reach the thousands of independent contractors that are the key to the quality of forest harvesting operations. Through this network of SICs, **over 215,000 loggers have been trained in sustainable forestry**. Many logging companies are small businesses struggling in the current job environment. Training is an important way to ensure these small businesses are set up for success in the future.

SFI is also deeply committed to reaching young people about job opportunities in the forest sector to grow awareness and offer internship opportunities.
SFI has proven success in this arena through its Project Learning Tree (PLT) initiative. PLT provides supports to build long-term career pathways through skills development, mentorship, work experiences, and career resources to diverse young people.

We are partnering with the Maine Tree Foundation to get young people interested in green careers. We provided a grant to support training of Maine high school guidance counselors in Project Learning Tree's "Green Jobs: Exploring Forest Careers" curriculum, to show career pathways in the forest sector.

We are also supporting an effort in Mississippi to recruit new workers, military veterans, and displaced workers into the forest sector. This project involves participating in job fairs and other events to engage these target audiences about education options, green jobs, and career technical training for harvesting, forest products manufacturing, and conservation jobs.

SFI stands ready to collaborate with the federal government to contribute to the creation of more "green jobs" that not only build a sustainable workforce but advance healthy forests.

Thank you for the opportunity to share our thoughts with the Committee. If you are interested in discussing any of these ideas further, please contact Nadine Block, Senior VP of Community and Government Relations, Sustainable Forestry Initiative, at nadine.block@forests.org or 202-596-3456.