

Home Grown Bioenergy Contributes to Forest Health and Rural Jobs Across America

October 24, 2018—On Bioenergy Day and during National Forest Products Week, we recognize the importance of using domestic biomass for a wide variety of applications: renewable energy, heating and cooling, and biobased products, to improve forest health, mitigate climate change, and create jobs in rural America.

The undersigned groups, representing a wide array of interests, also recognize the importance of holistic solutions to mitigate the effects we are already seeing in U.S. forests due to climate change. Using excess biomass resources that are produced from existing forest management activities as well as wastes from the forest products sector supports forest health while reducing wildfire risk. These activities also create economic opportunity for rural America in the form of local jobs and economic activity.

While deforestation is a pressing global concern, the forested landmass of the United States has stayed stable for the past 100 years, despite a tripling of population growth, according to the U.S. Forest Service.ⁱ Nevertheless, U.S. forests still face pressing threats from climate change, pests, and urbanization. Sustainable biomass utilization can help support forest health while creating economic incentives to keep land forested.

Woody biomass has been referred to as a "Goldilocks" renewable – use too much, and we risk undue harm to ecosystems and forests.ⁱⁱ Use too little, and we risk having overstocked forests that are unhealthy and at increased risk of wildfire. Today, many forestry scientists argue that we've entered a "too little" scenario in which many U.S. forests are overstocked -- due to years of wildfire suppression -- and unhealthy because of the proliferation of invasive species and pests.

From producing long-lived building materials that sequester carbon, to generating renewable heating, cooling, and energy in local communities, smart biomass utilization can support the interrelated goals of forest health, forest carbon sequestration, water and air quality, creating and maintaining jobs, as well as keeping forests healthy for Americans' enjoyment and recreation.

Today, much of our western forests are facing a crisis of epic proportions. In California alone, 129 million trees have died since 2010, due to a combination of drought, pest infestations and the amplifying effects of climate change.ⁱⁱⁱ While some of these trees must be left in the forest to return important nutrients to the soil and provide habitat for wildlife, leaving millions of dry tons of wood in California's forests would increase wildfire risk to unacceptable levels.

Currently, this excess biomass is mostly being dealt with in the worst possible manner – open burning – which is costing taxpayers millions of dollars and emits carbon dioxide as well as other harmful air pollutants, including particulate matter and smog precursors. Unfortunately, this situation is not unique to California. Utilization of this dead wood and other types of woody biomass can support forest restoration projects and reduce the amount of hazardous fuels.

Using these and other biomass sources for baseload power and for heating and cooling needs in schools, hospitals, businesses and residences, can provide outsized benefits to local communities. Rural communities are especially dependent on fossil-based heat, and wild fluctuations in home heating oil and propane prices can cause economic pain in the communities least able to pay high heating bills. Conversely, using woody biomass in cold climates can deliver significant savings on heating bills while also creating local jobs.

The production of long-lived lumber building materials from wood, such as cross-laminated timber, provides immediate and long-lasting carbon sequestration, as well as creating important markets for domestic forestry products.

More broadly, other "waste" biomass materials, such as orchard waste, urban wood waste, or animal manures, are too often improperly disposed of – causing avoidable environmental damage in the form of degraded air and water quality, as well as climate impacts. Using these wastes for a variety of products can turn a problem into a solution.

Policymakers and officials cannot turn their backs on biomass as a solution. A recently released report by the Intergovernmental Panel on Climate Change, Global Warming of 1.5°, recognizes that biomass utilization combined with carbon sequestration (commonly referred to as BECCS—Bio-Energy with Carbon Capture and Storage) will be necessary if we are to keep global warming significantly below 2 degrees Celsius.^{iv}

The undersigned organizations are working to remove barriers to the use of domestic biomass as a source of renewable baseload power, heating, cooling, and biobased products. Smart biomass utilization will help protect and enhance forest health while creating domestic economic opportunity.

Signed,

25x'25 Alliance Adelante Consulting, Inc. Advanced Biofuels USA Alliance for Green Heat American Agriculture Movement American Wood Council Arkansas Advanced Energy Association Atlantic Power Attis Innovations, LLC Biomass One, LP Biomass Power Association Biomass Thermal Energy Council (BTEC) Bioroot Energy, Inc. BTMC Inc. Calforests Center for Natural Capital Central Oregon Intergovernmental Council Chip Energy Inc. Chris Cassidy, Individual County of Sandoval, New Mexico CT Bioenergy Consulting Curran Renewable Energy, LLC Environmental and Energy Study Institute Edgewood Log Homes Enpower Corp. **Entrepreneurship Northwest Environmental Consulting for Agriculture** Force Energy Systems Inc. Forest Business Network Forest Energy Corp. Framing Our Community, Inc. GL Environmental, Inc. **Grand Teton Enterprises** Hacienda Outdoor Wood Furnaces **High Desert Biomass Cooperative** High Desert Forest Solutions, LLC Idyllwild Forest Health Project **IHI Power Services Corp.** Innovative Natural Resource Solutions LLC John Youngquist & Associates Mrs. Akasha Kaur Khalsa, Individual Koda Energy, LLC Lignetics Inc. Loyalton Cogen Massachusetts Forest Alliance Mattole Restoration Council **Michigan Biomass** Mid-Atlantic Bioenergy Council (MABEC) Minnesota Department of Natural Resources, **Division of Forestry** National Alliance of Forest Owners (NAFO) National Association of Forest Service Retirees National Association of University Forest **Resources Programs** National Center for Appropriate Technology Nebraska Forest Service Northern Forest Center Novo Power, LLC Ochoco Lumber Co. Ohio Forestry Association, Inc. Old Wood LLC

Oregon Department of Forestry OZ Resources, Inc. **Pacific Ultrapower Chinese Station** Pellet Fuels Institute Pennsylvania Fuels for Schools and Communities PJ Woodlands LLC Precision Energy Services, Inc. Rayonier **Resource Professionals Group LLC Romena Consulting** Society for the Protection of NH Forests Solutions from the Land Spatial Informatics Group, LLC (SIG) State Lands Commission Sustainable Northwest Sustainable Trades and Advanced Technology Dept. Santa Fe Community College The Hardwood Federation Templin Forestry, Inc. Texas AgriForestry Small Farmers and Ranchers (TASFR) The Watershed Research and Training Center The Westervelt Company Think in Futures **Timber Plus** Treesource Inc. **TSS Consultants** U.S. EcoGen, LLC Virginia Loggers Association Wallowa Resources Community Solutions Inc. Washington State Dept. of Natural Resources Watershed Research & Training Center Wind River Biomass Utility LLC Wisewood Energy Yana Valachovic, Individual

ⁱ <u>Forest Resources of the United States, 2012</u>, U.S. Forest Service, 2014.

ⁱⁱ <u>Not All Bioenergy is Carbon Neutral</u>, The Nature Conservancy, Apr. 2018.

^{III} <u>Record 129 Million Dead Trees in California</u>, U.S. Forest Service, Dec. 2017.

^{iv} <u>Global Warming of 1.5°</u>, IPCC, Oct. 2018.