



# Forest Service

U.S. DEPARTMENT OF AGRICULTURE

## Wood Innovations Grants – FY 2023 Funded Proposals

The Wood Innovations Grant Program, officially named the Wood Innovations Funding Opportunity Program, is investing in proposals that expand traditional wood utilization projects, promote using wood as a construction material in commercial, institutional and multifamily buildings, and expand wood energy markets. Healthy forests depend on a healthy forest products economy, and these investments support local economies while directly contributing to improving forest health and lowering wildfire risks to communities.

### Alabama

APPLICANT / TITLE	FUNDING
Auburn University Auburn Timber Collaborative	\$299,494

### Alaska

APPLICANT / TITLE	FUNDING
Tok Wood Fuels LLC Fuel Log Production in Rural Alaska	\$300,000
Alaska Timber & Truss Alaska Timber & Truss One-Pass Mill (Log Ripper 200XP)	\$298,081

### Arizona

APPLICANT / TITLE	FUNDING
Dakota Logging Yavapai Firewood Processing Facility	\$201,000
Restoration Forest Products Windfall Sawmill Expansion	\$300,000
Novo Star Wood Products LLC Novo Star Wood Products LLC Expansion Project 2	\$300,000
Kaibab Millworks The Kaibab Mill Local Resource Restoration Project	\$224,067
Joe Dirt Excavating, Inc. Sawmill Upgrades and Expansions	\$215,000
Perkins Natural Resources Perkins Natural Resources LLC Expansion for Higher Production Project	\$225,200

### Arkansas

APPLICANT / TITLE	FUNDING
University of Arkansas SIPs-Based Pocket Neighborhood for a Rural Timberland Community	\$213,167

## California

APPLICANT / TITLE	FUNDING
<b>Mono County</b> The Missing Link: Solving Biomass Utilization Needs in the Eastern Sierra	\$299,889
<b>Karagozian &amp; Case, Inc.</b> Development of Progressive Collapse Guidance for Mass Timber Systems	\$67,470
<b>Hat Creek Lumber</b> Hat Creek Lumber	\$300,000
<b>West Biofuels LLC</b> Mariposa Forest Biomass to Renewable Bioenergy and Biochar	\$300,000
<b>Arbor Energy and Resources Corporation</b> Gasification demonstration to support the development of a biomass gasification plant in Placer County, CA	\$300,000
<b>Auberry Sawmill Inc.</b> Auberry Sawmill Improvement 2023A	\$225,000
<b>Franklin Logging, Inc.</b> Replace and Upgrade Planer Infeed System, Shasta Green Sawmill, Burney, CA	\$300,000
<b>Blue Forest Finance</b> Technical Assistance for Wood Utilization Entrepreneurs	\$125,000
<b>Angel City Lumber</b> Angeles National Forest x Angel City Lumber VG Flooring Project	\$81,000
<b>Indian Valley Community Service District</b> Advancing Wood Energy Microgrids for IVCS and the Community of Greenville	\$90,055
<b>Mote, Inc.</b> Mote Sacramento Carbon Negative Hydrogen Project 1	\$175,000.00

## Colorado

APPLICANT / TITLE	FUNDING
<b>Mountain Pine Manufacturing</b> Wood Strand Waste-Wood System Grant	\$160,000
<b>Rocky Mountain Timber</b> Rocky Mountain Timber Products Sawmill Optimization and Expansion	\$212,500
<b>Gates Family Foundation</b> Colorado Mass Timber Coalition	\$300,000
<b>Colorado Timber Resources</b> Colorado Timber Resources LLC Sawmill Expansion	\$175,000
<b>Cetna Energy LLC</b> Cetna Energy Walsenburg, CO, Cottage Grove, OR Biomass to Energy Project	\$300,000
<b>United States Endowment for Forestry and Communities</b> Embodied Carbon and Displacement Factor Tools	\$300,000
<b>PHX LLC</b> Sustainable Southwest Colorado Woody Biomass Management	\$200,000
<b>Eagle Valley Clean Energy, LLC</b> Eagle Valley Clean Energy, LLC	\$300,000
<b>Juno Residential</b> Circular Mass Timber Components	\$200,000

## District of Columbia

APPLICANT / TITLE	FUNDING
<b>American Wood Council</b> US Wood Products Environmental Product Declaration Database Expansion	\$253,000

## Florida

APPLICANT / TITLE	FUNDING
<b>University of Miami</b> Putting Florida Forests To Work: Developing Mass Timber Florida Buildings Typologies	\$125,000
<b>BBCJ Lumber LLC</b> Canter/Planer Mill	\$300,000

## Georgia

APPLICANT / TITLE	FUNDING
<b>Southern Legacy Wood Products</b> Southern Legacy Wood Products Energy Efficiency Renovation and Expansion	\$300,000
<b>Claude Howard Lumber Co Inc</b> Gangsaw Upgrade	\$83,454
<b>Georgia Forestry Commission</b> Georgia Forestry Commission Industrial Mass Timber Fire Prevention Workshop	\$63,857

## Hawaii

APPLICANT / TITLE	FUNDING
<b>Division of Forestry and Wildlife, DLNR Hawaii</b> Scaling Support for Sustainable Forestry in Hawaii	\$264,000
<b>Siglo Tonewoods</b> Expanding Koa Market Opportunities	\$183,251

## Idaho

APPLICANT / TITLE	FUNDING
<b>Valley County</b> Woody Biomass Pilot Program	\$150,000
<b>Burbidge Custom Timbers, LLC</b> Timber Manufacturing Efficiency Optimization	\$300,000

## Kentucky

APPLICANT / TITLE	FUNDING
<b>Dunaway Timber Company</b> Wood Pellet Plant in Western Kentucky	\$300,000

## Louisiana

APPLICANT / TITLE	FUNDING
<b>Southern Packaging, Inc.</b> Southern Packaging's New Mill Investment Boosts Local Economy, and Helps Improve Forest Health	\$300,000

## Maine

APPLICANT / TITLE	FUNDING
<b>Portland Museum of Art</b> Planning Support for the Portland Museum of Art's Blueprint Project	\$300,000
<b>TanBark Molded Fiber Products</b> Creating A New Market Accelerator to Replace Plastic Packaging With Type 3 Molded Fiber From Wood-based Cellulose	\$300,000
<b>Jesup Memorial Library</b> Jesup Library's Mass Timber Expansion	\$300,000

## Maryland

APPLICANT / TITLE	FUNDING
<b>Blueprint Partners Corp.</b> Windsor Connecticut Facility	\$300,000
<b>Maryland DNR Forest Service</b> Developing Priority Projects with the Maryland Wood Energy Team	\$240,000

## Massachusetts

APPLICANT / TITLE	FUNDING
<b>Bunker Hill Housing Redevelopment/Leggat McCall Properties</b> Bunker Hill Housing Redevelopment	\$300,000
<b>West Work, LLC</b> 1 Elmwood Street	\$300,000
<b>Lashway Lumber Inc.</b> A Better Approach to Drying Wood in Massachusetts	\$300,000

## Michigan

APPLICANT / TITLE	FUNDING
<b>Manthei Wood Products</b> Manthei Wood-Fired Boiler	\$300,000
<b>Northern Hardwoods Lumber, LLC</b> Northern Hardwoods Biomass Boiler and Energy System	\$1,000,000
<b>Shamco Lumber, Inc.</b> Shamco Lumber Mill and Market Expansion	\$300,000
<b>Michigan State University</b> Strategic Outreach, Engagement, and Technical Assistance: Expanding and Diversifying the Michigan Mass Timber Ecosystem to Increase Demand and Support Production	\$299,929

## Minnesota

APPLICANT / TITLE	FUNDING
<b>Dovetail Partners, Inc.</b> Northern MN Closed Cycle Biochar Pilot	\$271,480
<b>Midway Contemporary Art</b> Midway Contemporary Art Library Mass Timber Extension	\$150,000

#### Missouri

APPLICANT / TITLE	FUNDING
<b>Rural LLC</b> Thermally Modified Wood Products From Forest Service Timber	\$300,000

#### Montana

APPLICANT / TITLE	FUNDING
<b>Atelier May Architects</b> Shared Stewardships: Prototyping Mass Timber Mid-Density, Mid-Town Housing Communities	\$227,500
<b>National Museum of Forest Service History, Inc.</b> The National Conservation Legacy Center: Showcasing Wood Innovations Throughout History	\$150,000
<b>Meadowlark Log Homes Inc.</b> Electric Kiln for Faster Log Drying: Improving Quality in Log Home Construction	\$300,000

#### Nebraska

APPLICANT / TITLE	FUNDING
<b>National Arbor Day Foundation</b> National Arbor Day Foundation Headquarters	\$200,000

#### Nevada

APPLICANT / TITLE	FUNDING
<b>Tahoe Forest Products, LLC</b> Small Log Line Design, Engineering, and Installation	\$300,050

#### New Hampshire

APPLICANT / TITLE	FUNDING
<b>Ossipee Mountain Land Company</b> Ossipee Mountain Land Company Kindling Upgrade Project	\$300,000
<b>Brentwood Distribution, LLC</b> Wood Fiber Production for Mulch and Soil Enhancement	\$295,000

#### New Mexico

APPLICANT / TITLE	FUNDING
<b>RC Forest Products, LLC</b> Supporting Biomass Wood Products Manufacturing	\$113,958
<b>Mount Taylor Manufacturing</b> Enhanced Sawmill Volume, Value and Employment, Zuni Mountains, New Mexico	\$300,000

APPLICANT / TITLE	FUNDING
<b>Got Wood NM LLC</b> Got Wood NM Increased Biomass Timber Utilization	\$300,000
<b>Architecture 2030</b> The Mass Timber Tipping Point: Engaging design industry leaders to unlock the potential for widespread low-carbon timber building system	\$300,000

#### New York

APPLICANT / TITLE	FUNDING
<b>Sylvamo, NA Ticonderoga Mill</b> Burn More Bark Engineering	\$300,000

#### North Carolina

APPLICANT / TITLE	FUNDING
<b>Appalachian State University</b> Optimization of Hybrid Mass Timber Structures for Carbon Positive Affordable Housing	\$200,000

#### Ohio

APPLICANT / TITLE	FUNDING
<b>Velocys Inc.</b> Enabling negative emissions power production with post-combustion carbon capture for woody biomass boiler facility	\$300,000
<b>Stairbuilders and Manufacturers Association</b> "Increasing the Use of Wood in Stairways and Guard Systems - A Design Tool for Architects and Engineers."	\$200,000

#### Oregon

APPLICANT / TITLE	FUNDING
<b>Levi's Sawmill Services, LLC</b> Phase 1 of Multi-Phase Sawmill Upgrade to Restore Central Oregon Forests	\$166,150
<b>Adre, LLC</b> The Killingsworth Project - Performance Based Design for Resilient Mass Timber Creative Office	\$150,000
<b>KPFF</b> Design Parameters for Codification of Mass Timber Rocking Walls	\$275,000
<b>Softwood Export Council</b> Video to showcase the use of US softwoods in architecture and remanufacturing	\$47,975
<b>Wheeler Soil and Water Conservation District</b> Wheeler SWCD Mass Timber Facility	\$300,000
<b>The Beck Group</b> Heartwood Biomass - Capital Project Planning and Product Mix Optimization	\$100,000
<b>PathHouse, LLC</b> PathHouse	\$250,000

#### Pennsylvania

APPLICANT / TITLE	FUNDING
<b>Matson Lumber Company</b> Improving Forest Health by Minimizing Wood Waste in the Allegheny National Forest Region	\$300,000
<b>Brownlee Lumber, Inc.</b> Advancing Sawmill Efficiency & Sustainable Forestry through Optimized Edger Technology	\$300,000
<b>Northwest Hardwoods, Inc.</b> Microtec CT Log Scanning Feasibility Assessment	\$262,318
<b>Pennsylvania Department of Agriculture</b> Pennsylvania Wood Utilization Team	\$300,000
<b>WOODBED Corp</b> Improving low grade wood utilization and invasive pest control in the Allegheny region through an enhanced commercial firewood operation	\$300,000

#### Puerto Rico

APPLICANT / TITLE	FUNDING
<b>Centro para la Conservación del Paisaje</b> Analysis of the wood product supply chain in Puerto Rico	\$214,000
<b>Puerto Rico Hardwoods</b> Expanding Puerto Rico Hardwoods wood production and quality	\$174,891

#### Tennessee

APPLICANT / TITLE	FUNDING
<b>Thompson Appalachian Hardwoods</b> Log Merchandising System for Expanded Forest Utilization in Southern Appalachia	\$300,000

#### Utah

APPLICANT / TITLE	FUNDING
<b>Last Chance Lumber, LLC</b> Last Chance Lumber Sawmill, Part of Circle Valley Farms	\$300,000
<b>University of Utah</b> Qualification of Timber Buckling Restrained Braces and Design of 18-story Timber BRB Braced Building	\$175,000

#### Vermont

APPLICANT / TITLE	FUNDING
<b>Colton Enterprises, Inc.</b> Colton Enterprises Kiln Dried Firewood Equipment & Energy System Upgrades	\$300,000
<b>Sweetland Farms</b> Agricultural use of Low-Grade Woody Biomass for Local Food Production	\$243,525
<b>Fontaine Millworks, LLC</b> Sawmill Waste to Thermal Energy for Dry Wood Chip Production, Kiln Drying and Space Heating	\$274,007

#### Virginia

APPLICANT / TITLE	FUNDING
<b>Virginia Polytechnic Institute and State University</b> Maximizing Hardwood Utilization in CLT Through the Use of Random Width Lumber	\$142,336
<b>Virginia Polytechnic Institute and State University</b> Increasing mass timber utilization for multi-use industrial buildings	\$90,458

#### Washington

APPLICANT / TITLE	FUNDING
<b>S.D.S. Lumber LLC</b> S.D.S. Sawmill Innovative Capacity Improvements	\$300,000
<b>Community Roots Housing</b> Kent Downtown Community Tall Wood Housing	\$300,000
<b>CMF LLC</b> Sawmill upgrade to kiln dried lumber with wood fired boiler	\$134,000
<b>Green Canopy NODE</b> Carbon offset for mass timber in long-lasting structural building elements	\$300,000
<b>R&amp;D Modular LLC</b> R&D Modular LLC   Prototype and Replication	\$60,000

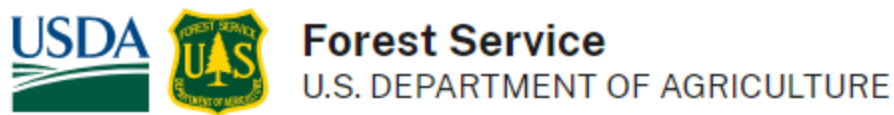
#### Wisconsin

APPLICANT / TITLE	FUNDING
<b>University of Wisconsin-Stevens Point</b> Underutilized, sustainably managed maple to substitute imported eucalyptus pulp	\$100,000
<b>The Neutral Project LLC</b> The Edison	\$300,000

#### Wyoming

APPLICANT / TITLE	FUNDING
<b>Bearlodge Forest Products Inc.</b> Bearlodge Forest Products Mill Upgrades benefit forest health on FS & adjacent lands	\$250,000
<b>Western Wyoming Timber Services</b> Heating Western Wyoming While Contributing To Fuel Reduction	\$25,443
<b>Black Forks Timber Products, Inc.</b> Black Forks Timber Products, Inc. Firewood Processor	\$164,644





### 2022 Wood Innovations Grant Recipients

The Wood Innovations Grants Program, launched in 2015, stimulates and expands wood products and wood energy markets. Relevant legislation includes the Agriculture Improvement Act of 2018 (Public Law 115- 334) and Rural Revitalization Technologies (7 U.S. Code [USC] 6601). National focus areas include mass timber, renewable wood energy, and technological development that supports fuel reduction and sustainable forest management.

(NEW) [2022 Wood Innovations and Community Wood Press Release](#)

### 2022 Wood Innovations Grant Recipients

Project	Organization	City, State	Award
Biomass System Training and Audit Program	Alaska Energy Authority	Anchorage, AK	\$112,500
Ionia Village Sustainable Heat and Home Project	Ionia, Inc.	Kasilof, AK	\$96,060
San Carlos Apache Tribe Cutter Sawmill Start-Up and Training Assistance	San Carlos Apache Tribe	San Carlos, AZ	\$249,725
Engineering Functionalized carbon from forest residue to enhance health of air and the built environment	Arizona State University	Tempe, AZ	\$250,000
Woody Biomass/Wood Biomass Dryer, Grinder, and Briquette Machine	Joe Dirt Excavating, Inc.	Williams, AZ	\$250,000
Tools for forest biofuels market development in California	University of California, Berkeley	Berkeley, CA	\$102,529
Design and implementation of high-performance solar kilns for California feedstock and climate	University of California Berkeley	Berkeley, CA	\$172,028
Sawmill Upgrade to Produce Higher-Value Lumber from Fire Salvage Logs	Collins Pine Company	Chester, CA	\$250,000
Wildfire recovery and community rebuilding through a small-scale sawmill operation	J&C Enterprises	Crescent Mills, CA	\$218,500

Project	Organization	City, State	Award
Demonstration of a Cost-Effective CLT Panel Capable of Resisting DOS/DOD Design Basis Threats – Phase II	Karagozian & Case, Inc	Glendale, CA	\$92,200
Shavings Plant Expansion with New Innovative Technology-Jamestown, CA	American Wood Fibers, Inc.	Jamestown, CA	\$250,000
North Fork Lumber 5MW Biomass Cogeneration Design & Permitting	North Fork Lumber Company	Korbel, CA	\$250,000
LA TIMBER BRIDGE: Forest trees to furniture built for/by the unhoused in LA	Would-Works, Inc.	Los Angeles, CA	\$50,000
Natural Fiber Insulation Material from Forest Biochar for Sustainable Fire-Resistant Buildings	University of California	Merced, CA	\$207,361
Winch Assisted Attachment Installation for Steep Slope Harvesting	J & R Logging, Inc.	Mt Aukum, CA	\$249,050
Engineering to support development of a wood waste to biofuel gasification plant in the Northern Sierra Nevada	Yosemite Clean Energy, LLC	Oroville, CA	\$250,000
SF Bay Area Targeted Biochar Marketing Strategy Implementation: Compost Amendments, Storm Water Remediation & Manure Management.	Earth Foundries, Inc.	Saratoga, CA	\$250,000
Forestree Collective: increasing wood products manufacturing & markets	Forestree Collective	Sebastopol, CA	\$100,000
Forest Resilience Bond to Support Post-Fire Restoration	Blue Forest Conservation	Shaver Lake, CA	\$249,130
Alpenglow Timber: Wood Processing Infrastructure Project	Alpenglow Timber LLC	Truckee, CA	\$250,000
Trash is cash: Reducing the logistical barriers for utilizing non-merchantable wood as renewable biofuels and bioproducts	Takachar Limited	Ukiah, CA	\$100,000

Project	Organization	City, State	Award
Mount Lassen Power Wood Energy Expansion - Biomass Power Plant Restart Project	Mount Lassen Power Inc.	Westwood, CA	\$250,000
Wood Products Climate Forest Finance Initiative	Impact Finance Center	Denver, CO	\$250,000
3495 Wynkoop	Wynkoop Investors, LLC	Denver, CO	\$250,000
Advancing mass timber as a climate solution in three U.S. cities to scale up its use and encourage investment in U.S. manufacturing	Olifant, LLC	Denver, CO	\$250,000
Accelerating Market Acceptance of Modular CLT Components Through Certification of Replicable Rural CLT Manufacturing Methodologies	Timber Age Systems, Inc.	Durango, CO	\$117,606
Practical modeling approaches for buildings with mass timber lateral systems	Colorado School of Mines	Golden, CO	\$150,000
Unified Marketing Strategy to Help Reduce Hazardous Fuels in the Wildland Urban Interface	Sustainable Resources Institute, Inc.	Lakewood, CO	\$173,500
The Impacts, Benefits, and Challenges of Bioenergy from Forests: A Multi-Stakeholder Dialogue and Analysis Initiative	Yale University	New Haven, CT	\$133,167
Resilient Forests – Responsive Structures: Regenerative Silviculture and Experimental Mass Timber Components for the US Northeast	Gray Organschi Architecture	New Haven, CT	\$250,000
Mass Timber Outreach	Mass Timber Strategy	Washington, DC	\$100,000
Advancing Social Impact Using Mass Timber in Industrial Building Types	Sustainable Forestry Initiative	Washington, DC	\$249,108
Forest to Building: Catalyzing the Building Language of the Wood Basket	University of Florida	Gainesville, FL	\$238,564

Project	Organization	City, State	Award
Engage ESG Stakeholders to Gain Assurance of Sustainability in Support of All Private Working Forests and Domestic Wood Supply	Forest Landowner Foundation	Atlanta, GA	\$220,000
Advancing the Awareness and Acceptance of Mass Timber in Georgia	Georgia Forestry Foundation	Forsyth, GA	\$199,100
Development and Distribution of Tools for Fast and Accurate CLT Engineering Design	Equilibrium Consulting Inc.	Sandy Springs, GA	\$60,000
Forest-to-Farm: An innovative network to diversify wood product markets, encourage sustainable forest management, and enhance water quality	Iowa State University	Ames, IA	\$241,216
Star Lofts	Cutler Development, LLC	Des Moines, IA	\$250,000
Structural Evaluation and Architectural Design of a Mass Timber Overbuild at the University of Idaho	University of Idaho	Moscow, ID	\$178,268
Production of Wooden School Furniture from Low-Value Hardwoods	Purdue University	West Lafayette, IN	\$94,498
Fire Retardant Treated Oriented Strandboard (FRTOSB) for Modern Construction	Louisiana State University Agricultural Center	Baton Rouge, LA	\$249,754
Ashfield Combined Biochar & Power Facility	Roberts Energy Renewables, Inc	Ashfield, MA	\$250,000
Mass Timber Design in Minutes, not Months: A Hybrid Mass Timber Building Solution for Supply-Chain Integration	Generate LLC	Boston, MA	\$250,000
88 NoWa Hotel Project	NOWA LLC and West End Acquisition LLC	Boston, MA	\$250,000
The New England Heat Modified Mass Timber Initiative	IKD	Boston, MA	\$250,000

Project	Organization	City, State	Award
High Efficiency Steam Energy from Woody Biomass Residuals	Maine Woods Company	Portage, ME	\$250,000
CLT office tower and retail demonstration project to expand markets for Maine's forest products	Dirigo Center Developers LLC	Westbrook, ME	\$250,000
Catalyzing Michigan Mass Timber Manufacture and Demand by Piloting Michigan-Sourced-and-Made Nail-Laminated Timber	Michigan State University	East Lansing, MI	\$252,638
Increasing acceptance of northern hardwood lumber into cross-laminated timber (CLT) by repurposing low-grade red maple	Michigan Technological University	Houghton, MI	\$247,790
The mass-timber flagship building at Adelaide Pointe Marina	Leestma Management	Muskegon, MI	\$256,856
Assessment for Scrimber Engineered Wood Products from Northern Minnesota Softwoods	University of Minnesota Duluth	Duluth, MN	\$48,727
Life cycle analysis of cross laminated timber: increasing awareness and utilization of wood products in the building community	Mississippi State University	Mississippi State, MS	\$249,999
Biomass Energy in the Wildland-Urban Interface, Sangre de Cristo Mountains, New Mexico	Biocultural Connections – The Climate Conservancy	Mora, NM	\$57,101
Heizomat wood chip boiler installation with integrated Cyclone/ESP emission control for kiln drying and heating of sawmill buildings	Brookside Lumber, Inc.	Moravia, NY	\$151,130
Log Sorting and Optimization	Wyeast Timber Services	Hood River, OR	\$243,125
Conversion of Post-Fire Charred Waste Woody Biomass to Sustainable Aviation Fuel & Renewable Diesel	Red Rock Biofuels Holdings, Inc	Klamath Falls, OR	\$244,700

Project	Organization	City, State	Award
Milwaukie Courtyard Housing Project	HomeWork Development	Milwaukie, OR	\$250,000
Modular Mass Timber Skeleton System	CutMyTimber	Portland, OR	\$250,000
PathHouse Modular Mass Timber Prototype	PathHouse LLC	Portland, OR	\$250,000
Restoration Wood, Building Projects with Positive Impacts	Sustainable Northwest	Portland, OR	\$250,000
A Regional Model for the All-Wood Building	Waechter Architecture	Portland, OR	\$124,084
Design Development for a Forestry Experience Center building demonstrating new, scalable, prefabricated mass-timber components	World Forestry Center	Portland, OR	\$249,918
Stacking Value: Connecting Forest Restoration, Biochar, Heat, and Carbon	Heartwood Biomass LLC	Wallowa, OR	\$236,740
Industry Outreach and Supply Chain Development for Birch Essential Oil Production Facility	Woodside Oils, LLC	Kane, PA	\$250,000
Philadelphia Reforestation Hub & Wood Utilization Pilot: Job Training through Life-Cycle Forest Management	PowerCorpsPHL	Philadelphia, PA	\$250,000
Development of a Clemson University Mass Timber Structure Training Program	Clemson University	Clemson, SC	\$128,093
Mass Timber Reconstruction of a High-Profile Academic Building at Clemson University: Lehotsky Hall	Clemson University	Clemson, SC	\$250,000
ForesTrust: Product and Carbon Traceability Throughout the Wood Products Supply Chain	U.S. Endowment for Forestry & Communities	Greenville, SC	\$250,000
Capturing carbon, reducing hazardous wood fuel, and creating jobs within the Wildland Urban Intersection	Urban Wood Economy Inc.	Memphis, TN	\$250,000

Project	Organization	City, State	Award
Full Circle Woodland Forestry a Circular Economic Project	Texas Urban Sawmill, LLC	Dripping Springs, TX	\$248,180
Accelerating Mass Timber Adoption with Standard-Format CLT	Sterling Site Access Solutions, LLC	Lufkin, TX	\$250,000
Highline Office Building	Gardner Company	Draper, UT	\$250,000
Multistate effort to economically produce structural grade hardwood lumber	Virginia Polytechnic Institute and State University	Blacksburg, VA	\$228,700
Expanding New Markets for Biochar Via Collaboration and Project Demonstrations	Virginia Department of Forestry	Charlottesville, VA	\$250,000
Prototype biochar permeable interlocking concrete pavers from low-value slash piles	University of California Davis	Pullman, WA	\$250,000
Assessment of borate-treated lamstock for a more durable CLT	Washington State University	Pullman, WA	\$249,954
The Digital Twins Project – Replicating Tall Wood Housing Models	atelierjones LLC	Seattle, WA	\$250,000
Bakers Place and The Edison	The Neutral Project, LLC	Madison, WI	\$250,000

## 2021 Wood Innovations Grant Recipients

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Project	Organization	City, State	Award
Develop Engineered Timber Structural Frame Components for an Innovative Modular Building System.	Cold Climate Housing Research Center, Inc.	Fairbanks, AK	\$235,006
Wood Biomass District Heat Boiler Installation	City of Nenana	Nenana, AK	\$167,745
Alaska Affordable Housing Using Local Wood Resources	TKC Fish Wheel	Anchorage, AK	\$167,201
Advancement of Timber Panels as Structural Elements in Timber-Steel Composite Floor Systems	Auburn University	Auburn, AL	\$237,172
Housing Innovation Incubator to Develop Sustainable Affordable Mass Timber Housing in Rural Arkansas	University of Arkansas	Fayetteville, AR	\$250,000
Using Forest Biomass for Construction Blocks - BetRblok	The Center for Alternative Building Studies	Tempe, AZ	\$99,765
Stimulating the Production and Use of Biochar Through Carbon Markets	Climate Action Reserve	Los Angeles, CA	\$113,417
Valorizing Forest Waste for Cellulosic Ethanol Production	Aemetis Advanced Product Keyes, Inc	Cupertino, CA	\$245,044
Demonstration of a Cost-Effective Cross-laminated Timber Panel Capable of Resisting Defense Design Basis Threats – Phase I	Karagozian & Case, Inc.	Glendale, CA	\$101,000
Complete Installation, Employee Training, and Commissioning of a Small Industrial Sawmill	Kirk M. Ringgold	Auberry, CA	\$250,000
Upgrading a Biomass Power Plant to Allow for Biochar Production and Increased Throughput of Forest Biomass	Pacific Biochar Benefit Corp.	Santa Rosa, CA	\$247,000
Coordinate and Develop a U.S. Corporate Climate and Forest Products Strategy	Net Impact	Oakland, CA	\$125,000
Nanocellulose Dispersion Composite Techno-Economic Analysis for the Tire Industry	AVAPCO LLC	Thomaston, GA	\$229,836
Value-Added Uses for a Prolific Invasive Tree Species Featuring an Iconic Hawaiian Sport	The Albizia Project, LLC	Waialua, HI	\$248,653



Combining the New and the Old: First Use of Cross-laminated Timber in Hawaii and Preserving Local Woodworking Knowledge	Hawaii Dept of Land and Natural Resources	Honolulu, HI	\$242,243
Affordable Housing Development Using Mass Timber Construction	Junction Development Catalyst, LLC	West Des Moines, IA	\$243,035
Upgrade and Install Small Diameter Lumber Sorting System and Lumber Stacker	Evergreen Forest	Kooskia, ID	\$250,000
Replace a Conventional Rotary Drum Fiber Dryer to Increase Productivity.	American Wood Fibers	Lebanon, KY	\$250,000
Developing Priority Projects with the Maryland Wood Energy Team	Maryland Department of Natural Resources	Annapolis, MD	\$249,869
Optimization of a Pilot-scale Fiberboard Manufacturing Line Using Underutilized Forest Resources and/or Recycled Wood-Based Products	University of Maine	Orono, ME	\$100,000
Design and Engineering of Newberry Mass Timber Customer Service Center Project	Michigan Department of Natural Resources	Lansing, MI	\$250,000
Expanding Markets for Hazardous Fuel Balsam Fir via the Low-Carbon Economy	University of Minnesota Duluth	Duluth, MN	\$187,246
Expanding Markets for Timber Industrial Mats Manufactured from Hardwood Species and Cross-Laminated Timber	Mississippi State University	Starkville, MS	\$206,125
Fannye Cook Conservation Education Complex: Demonstrating the Many Benefits of Building with Wood	Wildlife Mississippi	Stoneville, MS	\$250,000
Expanding the Wood Product Market in Mississippi	Mississippi Forestry Association	Jackson, MS	\$184,691
The National Conservation Legacy Center: Utilizing and Showcasing Cross-Laminated Timber and Other Innovative Wood Products	National Museum of Forest Service History	Missoula, MT	\$250,000
Develop Tools for Success for Biochar Market Development	University of Nebraska	Lincoln, NE	\$118,431
Eastern Hemlock Cross-laminated Timber Certification and Demonstration Project	North East State Foresters Association	Concord, NH	\$250,000
Building Affordable Housing with Mass Timber	Sustainable Northwest	Portland, OR	\$250,000
Forest to Frame: An Architecture of Resilient Forestry	LEVER Architecture	Portland, OR	\$100,000
Seedlings to Shelters: Modular Mass Timber Affordable & Replacement Housing	Kaiser + Path	Portland, OR	\$250,000
Bulk Pellet Storage and Distribution to Stabilize Oregon's Institutional Biomass Heating Market	Wisewood Energy	Portland, OR	\$250,000

Demonstrate Mass Timber Cost-Effectiveness as Part of Mass Timber Office and Retail Development Project	Beam Construction & Management, LLC	Portland, OR	\$230,000
Shortstack Housing Mass Timber Housing Platform to Develop Prototype Replicable Affordable Housing	Shortstack Housing, LLC	Portland, OR	\$235,000
Expanding the Forest Resilience Bond to the Pacific Northwest: Innovative Financing for a Forest Service Restoration Project	Blue Forest Conservation	Medford, OR	\$249,130
Utilizing Hem-Fir Species in Pacific Northwest Cross-laminated Timber Manufacturing	DR Johnson Wood Innovations	Riddle, OR	\$47,221
Demonstrate Patented Technology to Decarbonize Wood Pellet Feedstock Resulting in CO2 Emission Reduction.	Lignetics, Inc.	Mifflintown, PA	\$129,900
Work with Local Partners to Strengthen Connections Between the Island's Managed Forest Resources and its Artisan Network, Enhancing Local Wood-Processing Capacity	GreenWood	Carolina, PR	\$249,942
Generate Wood Energy Onsite from Sawmill Low-Value Waste Products	Thompson Appalachian Hardwoods, Inc.	Huntland, TN	\$250,000
Biomass Generation with Biochar for Island Energy Resilience	Orcas Power & Light Cooperative	Eastsound, WA	\$72,835
AKARI House - 18 Story Tall Timber Construction Using 2021 International Building Code	Clark Barnes PLLC	Seattle, WA	\$250,000
PRG 320 Certification for Ponderosa Pine and Hemlock White Fir	Vaagen Timbers LLC	Colville, WA	\$250,000
Cross-Laminated Timber Exterior Wall Testing to NFPA 285 Test Standard	Katerra, Inc	Spokane Valley, WA	\$102,000
Kretz Lumber Installation of a New Combined Heat & Power System	Kretz Lumber Company, Inc.	Antigo, WI	\$250,000

## **Press Release**

For Immediate Release: April 16, 2020

Contact: Olivia Walker

### **USDA Forest Service awards Wood Innovations Grants to reduce wildfire risk, invest in rural economies and support healthy forests**

WASHINGTON, April 16, 2020 – The U.S. Department of Agriculture’s Forest Service is investing in rural economies, reducing wildfire risk and improving forest conditions by awarding \$7.62 million in grants as part of the agency’s Wood Innovations Grant program.

The Wood Innovations Grant program advances innovations in wood products that create jobs, revitalize local economies and support sustainable forest land management. Thirty-five business, nonprofit, university and tribal partners in 19 states and Puerto Rico will match the grants with an additional \$131 million.

“Markets for wood products are key to supporting sustainable management and restoration of our nation’s forested lands,” said Forest Service Chief Vicki Christiansen. “We can keep both public and private forests healthy and resilient by fostering economic opportunities around wood products.”

This year the Forest Service received 103 proposals, demonstrating the expanding interest in using wood in traditional and innovative ways as a building material and a renewable energy source.

Of the 35 projects selected, 27 focus on expanding markets for wood products and eight seek to increase markets for renewable wood energy. This year’s projects expand uses for small diameter wood, develop new markets for biochar and wood-powered energy, explore using cross-laminated timber in health care facilities, examine how to finance urgent restoration work, and more.

The projects will take place in 19 states (Alaska, Arizona, California, Colorado, Hawaii, Illinois, Massachusetts, Maine, Minnesota, Mississippi, Montana, Nebraska, New York, Oregon, South Dakota, Utah, Virginia, Vermont and Washington) and Puerto Rico.

More information on the program is available online at the Forest Service [Wood Innovations](#) website.

#### **2020 Wood Innovations Grant Recipients**

<b>Project Title</b>	<b>Organization</b>	<b>City, State</b>
Hoonah Biomass Design Based on 2017 Feasibility Study	Hoonah Indian Association	Hoonah, AK
Southwest Ecological Restoration Institutes (SWERI) Wood Innovations and Utilization Team	Northern Arizona University Ecological Restoration Institute Forest Operations and Biomass Utilization	Flagstaff, AZ
Expanding the Forest Resilience Bond: Innovative Financing for a Forest Service Restoration Project	Blue Forest Conservation	Sacramento, CA

Riverpoint – Mass Timber Building Development	Crescent Real Estate LLC	Centennial, CO
Nail and Dowel Laminated Timber Diaphragms for Seismic Regions	Colorado School of Mines	Golden, CO
Characterizing and Quantifying Environmental and Economic benefits of CLT buildings across the US	Colorado School of Mines	Golden, CO
Increasing Processing Capacity and Overcoming Barriers for Utilization of Six Non-Native Plantation and Invasive Tree Species in Hawaii	Kamuela Hardwoods Inc.	Kamuela, HI
Timber City: An Awareness and Educational Program for the Tall Building Industry	The Council on Tall Buildings and Urban Habitat	Chicago, IL
Catalyzing the Deployment of Mass Timber Buildings in the Northeast	Generate LLC	Boston, MA
Demonstration Project for Increasing Whole House Pellet Heating Clusters	Maine Energy Systems, LLC	Bethel, ME
Mass Timber Hotel: Tuning CLT to Overcome Barriers to Adoption in the Hospitality Industry	Regents of the University of Minnesota	Minneapolis, MN
Development of Preservative-treated Southern Pine Cross-laminated Timber	Mississippi State University	Mississippi State, MS
Forestry Educational and Utilization Center: Showcasing Mass Timber and Other Innovative Wood Building Materials	Mississippi Forestry Foundation	Jackson, MS
Red Lodge Mountain Waste to Warmth Energy Project	Red Lodge Mountain	Red Lodge, MT
Middle Niobrara Natural Resources District Headquarters Heating Project	Middle Niobrara Natural Resources District	Valentine, NE
New York State Wood Utilization Team	SUNY College of Environmental Science & Forestry	Syracuse, NY
Prineville Renewable Energy Project Engineering and Design Study	City of Prineville	Prineville, OR
Expanding Small Diameter Wood Processing Capacity in Hood River, Oregon	Neal Creek Forest Products	Hood River, OR
Overcoming Market Barriers to Increase Use of Structural Mass Timber in Healthcare Environments	University of Oregon	Eugene, OR

Developing an application for Mass Plywood Panels in Seismic and Energy Wall Retrofit	University of Oregon	Eugene, OR
Expanding Forest Biomass Pellet Manufacturing Capacity	Blue Mountain Lumber Products, LLC	Pendleton, OR
Replacing and Upgrading Head-Rig Scanner System	Blue Mountain Lumber Products, LLC	Pendleton, OR
Building Markets for Forest Restoration Wood	Sustainable Northwest	Portland, OR
Fire Performance of Connection Made up of Custom CLT Layups Utilizing Pine from Logs Harvested in Western Forest Restoration Programs	Oregon State University	Corvallis, OR
Installation of Wood Chip Dryer and Processing Equipment using Renewable Energy and Heat Provided by Wind River Biomass Utility	Smokehouse Products, LLC	Hood River, OR
Economic Benefits and Ecosystem Services in Private Lands near El Yunque National Forest	Center for Landscape Conservation	San Juan, PR
Load Testing and Assessment of a Field Demonstration CLT Bridge	South Dakota State University	Brookings, SD
BRB Braced Frames for Seismically Resilient Mass Timber Buildings	University of Utah	Salt Lake City, UT
Market Assessments for the Expansion of Biochar Use and Sales	Next Generation Woods, Inc.	Hiwassee, VA
Part II of Expanding Markets for Thermally-modified Wood Products Produced from Low value Hardwood Species	Virginia Polytechnic Institute and State University	Blacksburg, VA
Increasing Hardwood Utilization in the Cross-laminated Timber Market	Virginia Polytechnic Institute and State University	Blacksburg, VA
Long Falls Paperboard Biomass Combined Heat & Power Conversion Project – Flue Gas Condensation Alternate to Achieve Maximum Efficiency	Long Falls Paperboard, LLC	Brattleboro, VT
Enhancing the Vitality of the Western U.S. Roundwood Manufacturing Industry	Western Wood Preservers Institute	Vancouver, WA
Demonstration of Fire Performance of Durable Wood Strand Mass Timber Panels	Washington State University	Pullman, WA

R&D Modular LLC   Workforce Mass Timber Modular Housing	R&D Modular LLC	Seattle, WA
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## Forest Service announces 2019 Wood Innovation Grant Awards

May 7, 2019 - Public-private partnerships spearheaded by the U.S. Department of Agriculture's Forest Service create jobs, support fire-safe communities, restore healthy forest conditions, and spur environmentally sound innovation. Today, the Forest Service awarded over \$8.9 million through the Wood Innovations Grant program. Thirty-nine business, university, nonprofit and tribal partners in 20 states are matching the grants with an additional \$8.8 million.

Projects will take place in 20 states including Alaska, Arizona, California, Florida, Georgia, Idaho, Massachusetts, Maine, Minnesota, Montana, North Carolina, Nebraska, Nevada, Oregon, Puerto Rico, South Carolina, Virginia, Vermont, Washington and Wisconsin. More information on the program is available online at the [Forest Service Wood Education and Resource Center](#).

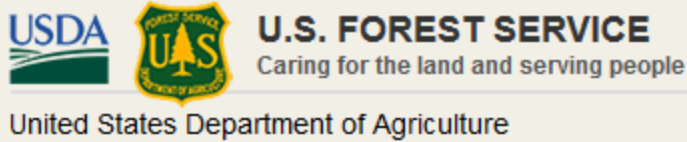
### 2019 Wood Innovations Grant Recipients

Project Title	Organization	State
Biomass Heating for Mentasta Traditional Council	Mentasta Traditional Council	AK
Victory Bible Camp Miracle Wood Boiler	Victory Ministries Inc., dba Victory Bible Camp	AK
Converting Forest Residues to Profitable Torrefied Briquettes for Export Markets	HM3 Energy, Inc.	AZ
Wood Grinder Lease to Facilitate Removal of High Wildfire Risk Fuels	Ampine	CA
CLT Modular Residential Unit Mock-Up	Factory OS	CA
Chipper Operations to Provide Feedstock to Biomass Power Plant	Jim Armstrong Inc.	CA
Development of a Cost-Effective CLT Panel Capable of Resisting DOS/DOD Design Basis Threats	Karagozian & Case, Inc.	CA
Sierra Nevada Small Scale Community Biomass Projects Collaborative	Mariposa County Resource Conservation District	CA
All That is Solid: Platforms for Wood Innovation	University of Miami	FL
Connecting Strong Wood Markets to the Health and Economy of Georgia's Forest Landscape	Forest Landowners Association	GA
Coated TerraLam Mat Field Study Project	Sterling/Deloitte Tax LLP	GA
University of Idaho Microturbine Power Generation Project	University of Idaho	ID

Wood Chip Small Scale CHP that WORKS: First U.S. Installation of German SPANNER Re2 Technology	Caluwe Inc. - Biomass Heat and Power Solutions	MA
Monetizing the Carbon Benefits of Mass Timber to Scale Up its Deployment in Mid-Rise Housing and Commercial Development: A Pilot in the Metropolitan Boston Area	Olifant, LLC	MA
WarmWood: Transforming the Insulation Market with Wood	GO Lab, Inc.	ME
University of Maine CHP Wood Energy System	University of Maine	ME
Savanna Pallets Bio-Mass Energy Expansion Project	Savanna Pallets, Inc.	MN
Demonstration of a Thermally Modified Eastern Larch Boardwalk to Catalyze New Markets for Low-Value Timber	University of Minnesota-Duluth	MN
Woody Biomass District Heating Plant at Moonlight Basin	Lone Mountain Land Company	MT
North Carolina Statewide Forest Products Marketing Team	North Carolina State University	NC
Great Plains Biochar Initiative II: Supply & Demand for a Biochar as a Cattle Feed Additive	Nebraska Forest Service	NE
Advancing Tall Mass Timber Buildings through Seismic Resilience Testing	University of Nevada, Reno	NV
Clackamas County Mass Timber Courthouse Design and Life-Cycle Demonstration	Clackamas County	OR
Timber Online Education	Design Build Research	OR
Process Automation and Market Expansion for Barrier-Wrapped Wood Posts and Poles	Integrated Biomass Resources, LLC	OR
Facilitation of Acoustics Testing for Sustainable Mass Timber Technologies, Leading to Publication of Open Source Acoustics Data for Standard Acoustics Scenarios	University of Oregon	OR
Forest to Soil — Combined Heat, Biochar, and Soil Products Production at an Existing Small Diameter Mill in Wallowa, OR	Wallowa Resources Community Solutions Inc.	OR
Developing the Infrastructure for a Puerto Rico Wood Products Team	University of Puerto Rico	PR
Enable the Use of Mass Timber Products for Non-Residential Buildings in High Velocity Hurricane Zone	Clemson University	SC
Development and Promotion of Mass Timber Noise Barriers for Highways	Clemson University	SC
Fire Safe Implementation of Visible Mass Timber in Tall Buildings	American Wood Council	VA
Forest Management, Market and Climate Impacts of Mass Timber Materials	The Nature Conservancy	VA



Multi-State Effort to Overcome Barriers to Low-Value Hardwood Lumber for CLT Manufacture	Virginia Tech	VA
Increasing the Value of Forest Fuel Thinning's Using Steam and Vacuum, Phytosanitary, Heat Treatments	Virginia Tech	VA
Overcoming Market Barriers for Advanced Wood Heat in Commercial & Institutional New Construction	Vermont Dept. of Forests, Parks & Recreation	VT
Mass Timber Hackathon and Global Mass Timber Design Competition including Fabrication and Construction of the Winning Design as a Showcase Model	Howes Development Inc.	WA
Study to Validate the Floor Vibration Design of a New Mass Timber Building	KPFF, Inc.	WA
Multi-Story Mass Timber K–12 School Prototype: Meeting Washington State's Classroom Capacity Needs with Mass Timber	Mahlum Architects	WA
Urban Mass Timber Floor Heights Study/3161 Elliott LLC	UrbanVisions	WA
Process Modeling for CLTs Using SDT Feedstock	Washington State University	WA
Ascent MKE	Bookends North, LLC	WI



## USDA Forest Service Awards Wood Innovation Grants to Expand and Accelerate Wood Products Markets in 20 States

**MAY 16, 2018 AT 4:00 PM EDT** - Today USDA Forest Service Interim Chief Vicki Christiansen announced the award of almost \$8 million to expand and accelerate wood products and wood energy markets. The Wood Innovation Grants will stimulate the removal of hazardous fuels from national forests and other forest lands to reduce the risk of catastrophic wildfires, promote forest health, and reduce the cost of forest management.

### 2018 Wood Innovations Grant Recipients

Project Title	Organization	State
Craig High School Wood Heating Conversion	Craig City School District	AK
Demonstration of Juniper Chip Wattles Blended with Biochar for Heavy Metal Filtration and Stormwater Management in Open Pit Mining and Quarrying Operations	Arizona Department of Forestry and Fire Management	AZ
Biomass Heating Projects at Minimum Security Conservation Camps in California	California Department of Forestry and Fire Protection	CA
Feller-Buncher Equipment Lease to Facilitate Removal of High Wildfire Risk Fuels	H.L. Power Company, LP	CA
Building California's Biochar Market to Foster and Grow Bioenergy	Phoenix Energy	CA
Rio Bravo Rocklin Biomass Power Plant, High Fire Hazard Fuel Handling Project	Rio Bravo Rocklin	CA
Seismic Design Provisions and Commentary for Post-Tensioned Mass Timber Walls	Colorado School of Mines	CO
Kick Starting the Timber Age in Southwestern Colorado	Timber Age Homes, Inc.	CO
Northern Forests to Timber Cities: Linking Urban Construction Demand to Northern Forest Mass Timber and Harvested Wood Products	Gray Organschi Architecture	CT
Kingman Island Ranger Station	Hickok Cole Architects	DC

Hawaii Wood Utilization Team: Developing Markets for Hazardous Fuel Wood	Hawaii Department of Land and Natural Resources	HI
An Engineering Demonstration for a Mass Timber Affordable Housing Prototype for Large-scale Urban Deployment	Massachusetts Institute of Technology	MA
Construction Cost and Time Estimating Tool Development and Industry Outreach for Cross-laminated Timber Buildings	Michigan State University	MI
Thermal Modification of Blue-Stained Lodgepole and Ponderosa Pine	University of Michigan	MI
Northern Cheyenne Wood Energy Project Development and Forest Health Improvement	Northern Cheyenne Tribe	MT
Utilization of Small Diameter Timber to Manufacture Engineered Wood Products for Use in Commercial and Residential Building Construction	Wooden Haus Supply LLC	MT
Proving Cross Laminated Timber Panels for Residential Homes	North Carolina State University	NC
Deploying Altree™ and Althin™ Technology at Camp Navajo Utilizing Biomass to Manufacture Life Saving Materials	PJ Woodlands, LLC	NM
Overbuilds with Mass Timber - Building Preservation, Restoration and Growth	Acme Timber LLC	NY
Affordable Housing Opportunities with Mass Timber	Spiritos Properties LLC	NY
The Spar	Kaiser Group Inc.	OR
U.S. Mass Timber Floor Vibration Design Guide and Validation	KPFF, Inc (Portland Structural)	OR
Forging New Links Between Lands and People	Oregon Forest Resources Institute	OR
Demonstrating Use and Performance of a CLT Modular Building Utilizing Low-value Pine Lumber from Logs Harvested in Pacific NW Forest Restoration Programs	Oregon State University	OR
Fire Performance of Custom CLT Layups Utilizing Pine from Logs Harvested in Western Forest Restoration Programs	Oregon State University	OR
Wood-to-Biochar Business Opportunity Development	Pennsylvania State University	PA
Biomass Gasification Cluster to Create Renewable Natural Gas for Transport Fuel in Missouri	Clean Development International	UT
Expanding Market Opportunities to Improve Forest Health and Utilization	Virginia Department of Forestry	VA
Expanding Markets for Thermally-modified Wood Products Produced from Low-value Hardwood Species	Virginia Tech	VA
Design, Engineering and Cost Estimation for a Demonstration CLT Townhouse	Halevi Development Co.	WA
Catalyzing Large Scale Restoration and Economic Development in the Eastern Cascades	The Nature Conservancy	WA

Developing an Export Oriented U.S. Wood Pellet Industry in the Pacific Northwest with a Focus on the Asian Market	University of Washington	WA
Accelerating the Adoption of Round Timber Trusses in Commercial Construction	Whole Trees, LLC	WI
Producing CLT Panels from Low Value Appalachian Hardwoods: Part 2, Demonstrating CLT Panel Production, Properties, and Use	West Virginia University	WV

## 2017 Wood Innovations Grant Recipients

Table 1- 2017 Wood Innovations Grant Recipients

Project Title	Organization	State
Biomass Gasification for Combined Heat and Power	Fairbanks North Star Borough	AK
Tazlina Cordwood Fired Boiler District Heating System Design	Native Village of Tazlina	AK
Growing Markets for Alabama Wood Products	Alabama Forestry Foundation	AL
Arkansas Wood Utilization Council	University of Arkansas	AR
Feasibility Assessment for a Commercial Scale Woody Biomass Conversion Facility in Central Arizona	Town of Prescott Valley	AZ
Wood-based Biochar as an Alternative Adsorption Media for the Control of Off-gasses at Wastewater Treatment Plants	CA Association of Sanitation Agencies	CA
Camptonville Forest Biomass Business Center Bioenergy Facility	Camptonville Community Partnership	CA
Rebuilding Biomass Energy Feedstock Trucking Capacity in Northeastern California	H.L. Power Company LP	CA
Hazardous Fuels and Tree Mortality Removals	J.W. Bamford, Inc.	CA
Building Momentum for Biomass: Designing Quincy Jr/Sr High School's Biomass Heating System and Navigating California's Division of the State Architect (DSA)	Plumas Unified School District	CA
Western Nevada and Central Sierra Nevada of California Regional Wood Utilization Team	Regents of University of California, Santa Cruz	CA
Mammoth Lakes Integrated Biomass Waste Processing Center	Town of Mammoth Lakes	CA
Moving Biomass for Resilient Forests	Wood Source Fuels, LLC	CO
Blast-Resistant Testing for Loaded Mass Timber Structures	WoodWorks	DC
Expanding the CLT Market into Temporary Military Structures	GA Institute of Technology	GA

## 2017 Wood Innovations Grant Recipients

Project Title	Organization	State
Biomass Boiler Conversion Design & Engineering	Idaho Youth ChalleNGe Foundation	ID
WREP - Willow Renewable Energy Project	Precision Energy Services, Inc.	ID
Design and Engineering Solutions for Heavy Timber Commercial Construction in the Inland Northwest	University of Idaho	ID
Indiana Hardwood CLT Project	IKD	MA
Potential Impact of the Biochar Industry on National Forests	Dovetail Partners, Inc.	MN
Minnesota Made Transitional Nail Cross Laminated Timber (nCLT) Panels	University of MN	MN
Great Plains CLT market Development through Architectural Education	University of NE-Lincoln	NE
Great Plains Biochar Initiative	University of NE-Lincoln	NE
Mass Market Flooring from NFS Lands	Old Wood, LLC	NM
Sandoval County, NM Biomass Utilization Project	Sandoval County	NM
Houston House - 8 Story Tall CLT Passive House for Urban Infill Conditions	298 East Village Property LLC	NY
Scaled Demonstration of Biological Resin System to Expand the Non-structural Engineered Wood Market	Ecovative Design, LLC	NY
Freres Mass Plywood Panel Plant with Weinmann CNC Solution	Freres Lumber Co., Inc.	OR
Defining Project-specific Custom CLT Grade Utilize Low-value Ponderosa Pine Lumber from Logs Harvesting in SW Oregon and Northern California Forest Restoration Programs	Oregon State University	OR
Creating Manufacturing Capacity in the U.S. Mass Timber Sector	Oregon State University	OR
Post-tensioned CLT Rocking Walls	Home Forward Development Enterprise	OR

## 2017 Wood Innovations Grant Recipients

Project Title	Organization	State
Integrated Wood Products Campus	Wyeast Timber Services/Neal Creek Forest Products	OR
National Wood Energy Technical Assistance Team	Wilson Engineering Services, PC	PA
Using Forest Fire and Slash Residue for De-Europication of Regional Lakes	Ag Energy Solutions, Inc.	WA
Develop Manufacturing Capacity through the Purchase of CNC Machinery to Expand the Market for CLT in Commercial Building While Using Timber Sourced from National Forest System Restoration Projects	Vaagen Timbers, LLC	WA
Washington Woodland Cooperative: Firewood Program	Washington Woodland Cooperative	WA
Driving Commercial Construction Markets for SDRT: Digital Tools for Designers and Specifiers	Whole Trees LLC dba WholeTrees Architecture 7 Structures	WI
Producing CLT Panels from Low Value Appalachian Hardwoods	West Virginia University	WV

## 2016 Wood Innovations Grant Recipients

Project Title	Organization	Location
Hydaburg School Wood Biomass Project	Southeast Island School District	AK
Haines Biomass Project	The Haines Borough	AK
From Forest to Campus: The Innovative Timber University	University of Arkansas	AR
Northeastern California Community Biomass Energy Cluster	Fall River Resource Conservation District	CA
Mariposa Biomass Project	Mariposa County Resources Conservation District	CA
Bioenergy/Biomass Financing Technical Assistance Initiative	Northern Californian Community Loan Fund	CA
Development of Market Incentive Mechanisms for Expansion of Wood to Energy in SMUD Service Territory	Sacramento Municipal Utility District (SMUD)	CA
Business Innovation: Biomass Combined Heat and Power Implementation	Sierra Institute for Community and Environment	CA
Soper-Wheeler Bulk Mulch Market Development	Soper-Wheeler Co. LLC	CA
Adding Value to Forest Biomass with Innovative Niche Mulch Market	Viramontes Express, Inc.	CA
Upper South Platte Fuels to Schools Program	Coalition for the Upper South Platte	CO
Expanding CLT Market through Building Moisture Monitoring and Improved Modeling	Colorado School of Mines	CO
Wood Straw Market Expansion	Mountain Pine Manufacturing, Inc.	CO
Removing Development Barriers for River Ridge "black" Pellet Product Facility & Expansion of "black" Pellet Domestic Markets	Centennial Renewable Energy, LLC	ID
Assessing the Wood Supply and Investment Potential for a New England Engineered Wood Products Mill	New England Forestry Foundation, Inc.	MA
Maine State Wood Energy Assistance Team	Maine Forest Service	ME
Strengthening and Expanding Maine Wood Markets	Maine Forest Service	ME
Michigan Forest Products Secondary Manufacturer Survey	Michigan Dept. of Natural Resources	MI
Ensuring Salvaged, Beetle-Killed Trees are Utilized for the Highest and Best Use through the Application of New Technologies	Michigan Technological University	MI



## 2016 Wood Innovations Grant Recipients

Project Title	Organization	Location
Michigan Wood Innovation Team	Renewable Resource Solutions	MI
Development of a Knowledge Management System to Support the U.S. CLT Industry	University of Minnesota	MN
Green Building with Structural Insulated Panels Incorporating Lignin-based Polyurethane Foam Cores	Mississippi State University	MS
Developing New Processes for Fire Retardant, Mold and Decay Resistant Panels from Southern Pine and Sweetgum	Mississippi State University	MS
Wood Products Diversification Plan	Marks Lumber, Inc.	MT
Nebraska Wood Energy Team	University of Nebraska-Lincoln	NE
Design and Engineering of a Western Juniper Biofuel Facility	Forest Energy Group, LLC	OR
Carbon12 (8-story mixed-use timber frame building including CLT)	Kaiser Group Inc.	OR
Oregon Torrefaction Project	Ochoco Management, Inc.	OR
Integration of Biomass District Energy - Oregon State University Cascades	Oregon State University	OR
Northern California OSB Plant Due Diligence	The Beck Group	OR
Wallowa County Biomass Pyrolysis - Linking Forest Restoration with Regenerative Agriculture	Wallowa Resources	OR
Utilization of CLT in Low and Mid-rise Buildings for Enhanced Wind Performance	Clemson University	SC
Prefab Wood: Panelized and Modular Wood Frame Innovations in the Intermountain West Region	Sunroc Building Materials	UT
Development of CLT Markets for Hardwood Lumber Producers to Promote Forest Health and Support of Rural Communities	Virginia Tech	VA
Promoting Modern Wood Heating in Vermont	Vermont Dept. of Forests, Parks & Recreation	VT
Converting Forest Fuels to Revenue through Gasification	Ag Energy Solutions	WA
Accelerating Development of CLT Market in Washington State with a Cross-sector Coalition	Forterra	WA
Quinault Indian Nation Pellet Manu. Facility Engineering & Design	Quinault Indian Nation	WA

## 2016 Wood Innovations Grant Recipients

Project Title	Organization	Location
Spokane Tribe Biomass District Energy System for Wellpinit, WA	Spokane Tribes of Indians	WA
Next Generation CLT: Combining Thermal Modification and Carbon-based Nanoparticles	University of Washington	WA
Building Code Acceptance of Wood Products Under Design Fire Scenarios.	University of Wisconsin-Madison	WI
Seismically Resilient CLT Inverted Pendulum Solutions for Tall Wood Buildings	University of Wisconsin-Milwaukee	WI

## **USDA Awards Funds to Expand and Accelerate Wood Energy and Wood Product Markets in 23 States**

***A new partnership agreement with the Softwood Lumber Board announced to promote innovative wood building technologies***

WASHINGTON, April 9, 2015 - Today Agriculture Secretary Tom Vilsack announced the award of over \$9 million to expand and accelerate wood energy and other wood product markets. The federal funds will leverage \$22 million in investments from partners, resulting in a total investment of \$31 million in 23 states.

States receiving funding include: Alaska, Ariz., Calif., Colo., Idaho, Ill., La., Mass., Mich., Minn., Mont., N.C., Neb., Nev., Ore., Pa., S.C., S.D., Utah, Va., Vt., Wash., and Wis.  
[See a complete list of the awards.](#)

## 2015 Wood Innovations Grant Recipients

Project Title	Organization	Location
Community Sustainability Handbook: Best Practices for a Biomass-Heated Greenhouse at your Alaska School	Alaska Energy Authority	Anchorage, AK
A Market Characterization of Salvaged Yellow-Cedar Wood Products in Southeast Alaska: Opportunities for Innovation, Expansion, and Community Economic	University of Alaska Southeast	Juneau, AK
Composting Forest Biomass to Reduce Hazardous Fuels and Promote Forest Restoration in the Southwest	Good Earth Power AZ (GEPAZ)	Flagstaff, AZ
Round Wood Guardrail Demonstration Project	AZ State Forestry Division	Phoenix, AZ
Sierra Foothills Bundled Energy Development	Fire Safe Council of Nevada County, Inc.	Grass Valley, CA
Blue Lake Roundstock Company, LLC (BLRC) Plant Expansion Project	Allotrope Partners	Oakland, CA
Thermal Gasification of Forest Residues for Combined Heat and Power (CHP) Application in the SMUD Region	Sacramento Municipal Utility District	Sacramento, CA
Blast-Resistant Testing for Massive Timber Exterior Wall	WoodWorks	San Marcos, CA
Plumas County Energy System	Sierra Institute for Community and Environment	Taylorsville, CA
Utilizing Biochar to Sequester Carbon, Fortify Local Agriculture, Reduce Soil and Water Pollution, and Improve Land Management	Western Excelsior Corporation (WEC)	Mancos, CO
Pagosa Springs Biomass Power Project	Renewable Forest Energy, LLC	Pagosa Springs, CO
CRE, LLC Wood Pellet Facility Pre-Financial Close Project	Centennial Renewable Energy, LLC	Pocatello, ID
The Potential for Fuel Switching to Wood in Illinois - A Sector Study	University of IL Sustainable Technology Center	Champaign, IL
Development of Bio-Based Spray Foam Insulation from Wood Residues	Louisiana State University	Baton Rouge, LA
MA Statewide Wood Energy Action Team	Massachusetts Forest Alliance	Marlborough, MA
Statewide Wood Energy Team for Michigan	Michigan State University	East Lansing, MI
Minnesota State Wood Innovation Team	University of Minnesota Duluth	Minneapolis, MN
Using Thermal Modification Technology to Add Value to Small-Diameter Logs from Underutilized Species	University of Minnesota Duluth	Minneapolis, MN
Deploying a Value-Added, Woody Biomass-Based Product Suite	Dovetail Partners, Inc.	Minneapolis, MN

<b>Project Title</b>	<b>Organization</b>	<b>Location</b>
Montana's Building More with Wood Project	MT Dept. of Natural Resources & Conservation	Mssoula, MT
Planning, Design, and Specification of a New Cross-Laminated Timber Plant	SmartLam LLC	Whitefish, MT
Appalachian and Foothills Wood Energy Markets	North Carolina State University	Raleigh, NC
Chadron District Energy Project	University of Nebraska	Lincoln, NE
NV Pinyon-Juniper Partnership and Continued Development of Biomass Product Markets	Eastern Nevada Landscape Coalition	Ely, NV
Central OR Biomass Energy Cluster Development Strategy + Project Development	Central Oregon Intergovernmental Council	Bend, OR
Utilization of Low-Value Lumber from Small-Diameter Logs Harvested in Pacific Northwest Forest Restoration Programs in Hybrid Cross Laminated Timber Core Layers	University of Oregon	Corvallis, OR
Bulk Biomass Fuel Distribution for Biomass Thermal Market Expansion in the Northwestern U.S.	Ed Staub & Sons, Inc	Klamath Falls, OR
Oregon Forest Products Marketing Program	Oregon Forest Resources Institute	Portland, OR
Commercial Biochar Products for Forest Restoration in the Pacific Northwest	Family Forests of Oregon	Salem, OR
Waste Heat Recovery and Residual Drying	Integrated Biomass Resources, LLC	Wallowa, OR
The Pennsylvania Wood Energy Team	The Pennsylvania State University	University Park, PA
Expanding the Use of Wood Building Products in SC	Clemson University	Clemson, SC
Utilization of By-Product from the Ecological Restoration of Forests on the Pine Ridge Reservation	Oglala Sioux Parks and Recreation Authority	Kyle, SD
A Cross Laminated Timber (CLT) Educational Building and Awareness Building Campaign	Utah State University	Logan, UT
Flexible Distributed Bio-Fuel Production from Forest Residue Targeting Hospitals for Combined Heat and Power Installations	Clean Development International	Salt Lake City, UT
Market Access for Tall Wood Construction	American Wood Council	Leesburg, VA
Virginia Statewide Wood Energy Team	Center for Natural Capital	Orange, VA
Innovations in the Design and Fabrication of Wood Barrels Used to Age Wine and Other Spirits	Southern Virginia Higher Education Center	South Boston, VA
Development of a National Woodchip Heating Fuel Stand	Vermont Energy Investment Corporation	Burlington, VT

<b>Project Title</b>	<b>Organization</b>	<b>Location</b>
Pilot Supply Chain for Advanced Manufacture of CLT in the Pacific Northwest	Washington State University	Pullman, WA
Conversion to Biomass in the Food Processing and Commercial Laundry Sectors in Yakima, WA	Yakima Specialties, Inc.	Yakima, WA
Wisconsin Wood Products Market Expansion	Sustainable Resources Institute, Inc.	Florence, WI
Menominee Tribal Enterprise's Woody Biomass Value-Added Fuel Market Development and Energy Cluster Project	Menominee Tribal Enterprises	Neopit, WI