CAL FIRE Business	and Workforce De	velopment Grant Appli	cations 2023	Q3	Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Biomass Transportation Subsidy	Hat Creek Bioenergy LLC	Hat Creek Bioenergy Biomass Transportation	Shasta Sonoma Yolo	\$ 2,000,000	Hat Creek Bioenergy LLC, in partnership with West Biofuels and Peterson Timber, seeks funding to subsidize the transportation of woody biomass from forest restoration operations in the Shasta-Trinity National Forest and other public and private timberlands to their community bioenergy facility in Burney, California. The project will show how transportation subsidies can support restoration efforts and incentivize the creation of new bioenergy facilities in areas where feedstock supply exceeds demand. In alignment with the program goals, the project will increase the annual acreage of forest treatment by helping create a new long-term user of 35,000 BDT/yr of residual biomass. The result is transforming material that would otherwise be burned in the forest into useful renewable energy for the community.
Biomass Transportation Subsidy	National Forest Foundation	North Yuba Landscape Forest Treatments Transportation Subsidy	Sierra Yuba	\$ 4,987,440	The North Yuba Landscape Forest Treatments Transportation Subsidy will support the transportation of timber, biomass, and non-saw logs from the Graveyard and Sleighville projects (Projects). The National Forest Foundation (NFF) in partnership with the USDA Forest Service Tahoe National Forest will be completing 6,100 acres of commercial thinning and small tree thinning in the Yuba River Ranger District. These treatments will result in approximately 340,000 GT of saw timber and 206,866 GT of biomass and non-saw logs needing to be transported to regional processing facilities. The transportation of wood materials will support the development of Camptonville Community Partnership's new, local bioenergy facility, the Washoe Tribe's Wood for Elders program, and additional bioenergy facilities in the region.
Biomass Transportation Subsidy	Pacific Ultrapower Chinese Station	Pacific Ultrapower Chinese Station Transportation Grant Application	Tuolumne	\$ 5,000,000	The grant funding would be utilized to load and transport biomass from the origination of the hazardous wood fuels to Pacific Ultrapower Chinese Station (PUCS) for the purpose of producing renewable electricity. PUCS would pay the cost of processing as well as a portion of the loading and transportation with the grant covering the additional cost of loading and transporting.

CAL FIRE Business	and Workforce De	velopment Grant Appl	ications 2023	Q3	Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Biomass Transportation Subsidy	Scotts Valley Energy Corporation	Scotts Valley Regional/Equitable Forest Biomass Incentive Program	Lake Mendocino	\$ 2,500,000	Scotts Valley Energy Corporation (SVEC; a tribally owned company) proposes a 4-year incentive program that will provide tonnage level incentive payments to support and rapidly advance the transport of forest derived biomass across Lake and of Mendocino Counties, in California. Targeting high priority regions, the project will help to alleviate historic buildup of excessive fuel in our region's forests. Moreover, SVEC will leverage the proposed funding to help drive additional outputs and end use markets for forest derived biomass in the target region. The proposed incentive program will alleviate a critical existing bottleneck that currently dampens our region's ability to make forest fuels reduction efforts economically viable, while supporting bioenergy development, local jobs, and equitable Tribal participation in forest management.
Biomass Transportation Subsidy	Woodland Biomas Power, LLC	Woodland Biomass Power Transportation Subsidy Program	Yolo	\$ 4,772,250	Woodland Biomass Power, LLC, a 28 MW wood fired power plant located in Woodland, CA, is applying for the biomass transportation subsidy to support the movement of 90,900 BDT from tier 1 and tier 2 priority landscape areas and Sustainable National Forest areas to the power plant. WBPL has identified eight suppliers who have high hazard material available, but for which the transportation charges to move the material to the power plant are cost prohibitive. Much of this material would otherwise be disposed of by open-air burning in the forest. WBPL offers a more controlled, lower emission alternative to this disposal method.
Business Development	Alpenglow Timber LLC	Alpenglow Timber Log Sorter Project	Nevada	\$ 393,400	There is a severe lack of wood product infrastructure in the North Tahoe-Truckee region to accept material generated by forest health and hazardous fuel reduction projects. Without an outlet, management activities have slowed, jeopardizing forest health, wildfire risk and the forest economy. Alpenglow Timber LLC will address this need by establishing a new 5.4 MMBF sawmill and associated wood energy system that will produce kiln-dried lumber, firewood, and district heating to commercial and residential units. The requested funding will support an automated log sort system that will track incoming logs for inventory and store by diameter to increase mill efficiency by up to 20%, for a gain of 0.9 MMBF lumber produced (3,450 BDT) and 200 acres treated per year.

CAL FIRE Business	s and Workforce De	velopment Grant Appl	ications 2023		Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Allotrope Cellulosic Development Company LLC (ACDC)	Anderson California Cellulosic Ethanol Facility	Shasta	\$ 2,000,000	ACDC is developing a cellulosic ethanol plant at 4645 Locust Road, Anderson California. The plant will utilize approximately 330,000 bone dry tons of biomass annually and produce approximately 20 million gallons of ethanol and 450,000 MMBTUs of Renewable Natural Gas per year. The low carbon intensity (CI) ethanol produced from this plant will ultimately be sold into the Sustainable Aviation Fuel (SAF) market. ACDC has partnered with Axens, a global petrochemical technology and engineering company to build this first of its kind plant utilizing their Futurol technology. Axens is offering a performance guarantee on their technology, that was developed over the last ten-plus years by a consortium of French companies with over \$100M of investment.
Business Development	Kodama Systems, Inc.	Autonomous Commercial Skidding Operations	Tuolumne	\$ 189,328	Logging business owners often have difficulty sourcing the skilled labor necessary to operate their business, and the industry faces headwinds as skilled operators approach retirement age. Kodama proposes productizing its semi-autonomous skidder for commercial operation on California forests. Kodama has successfully operated its semi-autonomous machine on the Stanislaus National Forest for the past four months and will run the machine on its LTO partner's site until the end of the 2023 season. The Kodama team has been working with two original equipment manufacturers (OEMs) to evaluate outfitting a new skidder with Kodama's autonomy system. This would enable Kodama to build a productized system that integrates seamlessly into a modern machine control system, improving crew productivity and logging business economics.
Business Development	Loamist	Biomass Marketplace	Statewide	\$ 500,000	Loamist introduces a pioneering Marketplace Software serving California's forestry waste biomass industry. This state-of-the-art platform bridges suppliers, buyers, and processors of waste woody biomass, optimizing the procurement process. Aiming to support California's goal of treating 1M acres, the software leverages the state's abundant waste woody biomass, targeting carbon sequestration and sustainable applications. This software will optimize waste biomass transactions in California by streamlining operations and offering utilization analytics. Proposed software features include real-time price listings, quality verifications, and logistics and freight booking tools. Loamist anticipates launching a functional prototype within 14 months, aiming to onboard at least 20 suppliers and 20 buyers post-testing. This initiative promises to solidify California's position in innovative biomass utilization and carbon sequestration efforts.

CAL FIRE Busines	s and Workforce De	velopment Grant Appli	<u>cations 20</u> 23	Q3	Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Blue Mountain Energy Company	Blue Mountain Energy Company Biomass Facility Construction	Calaveras	\$ 2,000,000	Blue Mountain Energy Company (BMEC) is a shovel-ready 3MW biomass plant in Wilseyville, CA. BMEC is located adjacent to a wastewater treatment plant operated by Calaveras County Water District (CCWD). We will connect the two plants, providing mutual benefit to each. The power plant will provide clean energy to CCWD, and BMEC will use CCWD's treated water for cooling. The project will produce carbon-negative energy from biomass, contribute to the decarbonization of rural wastewater treatment, decrease catastrophic wildfire risk, improve forest and watershed health, sequester carbon in the form of biochar, and provide jobs to underserved rural communities. Grant funds would support the construction phase of the BMEC plant, including the costs to connect BMEC to the CCWD treatment plant.
Business Development	Sierra Forest Products	Business and Workforce Development Grant 2023 Q3	Tulare	\$ 1,632,166	Sierra Forest Products ("SFP") intends to use the Business and Workforce Development Grant ("BWD Grant") to upgrade its planer. SFP plans to add five additional trays to its sorter, install an inline trimmer, and add a transverse grading system to improve its manufacturing efficiency. The planer upgrades would also reduce manufacturing costs and provide long-term workforce stability to on-site employees and forest-sector vendors. The planer upgrades entail industry-leading technology, and the upgrades would help SFP remain competitive with out-of-state businesses in the wood products industry. SFP plays an integral role in California and the Southern Sierras; therefore, BWD Grant funds would help SFP withstand market volatility and rising external and internal labor costs.
Business Development	County of Placer	Cabin Creek Biomass Facility	Placer	\$ 2,000,000	Placer County seeks to construct an innovative multiuse biomass campus at the Cabin Creek Biomass Facility in North Tahoe. A two phased approach, includes a first phase to establish a biomass to energy facility immediately while providing a long-term opportunity for innovation in the biomass conversion technology field in phase two. The First Phase: Consists of an electric power generation facility utilizing thermochemical conversion technology which will power the Tahoe Truckee Area Regional Transportation (TART) fleet of electric buses, net meter onsite energy usage, and sale of the excess energy by building an expandable two-megawatt (MW) energy facility. This project would increase the local biomass outlet capacity by 17,000 bone dry tons per year and provide renewable energy.

CAL FIRE Busines	s and Workforce De	velopment Grant Appl	ications 2023			Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Reque Fun		Project Description
Business Development	University of California, Agriculture and Natural Resources	California Wood Products Innovation Campuses: A Replicable Model to Promote Bioeconomy Industry Clusters	Fresno San Bernadino	\$ 50		This project will conduct a feasibility study and develop a business plan for the "California Wood Product Innovation Campus" at two locations (Fresno & San Bernardino) to serve as demonstration sites for forest biomass technologies and products. This project will build an industry-driven, replicable model to develop a strong regional bioeconomy industry cluster by providing technical assistance to companies, identifying and supporting growth of both biomass utilization companies and suppliers and service providers to those companies. These locations are considered high priority disadvantaged/low income and wildfire risk to forest ecosystem services areas by CalFire. This innovative, industry-driven, replicable business development program will catalyze a robust bioeconomy "supply chain" as the first step in facilitating expansion to other areas in California.
Business Development	Lepage Company Inc.	Carbonizer Mobile Pyrolysis to Advance Fuel Reduction & Biochar Utilization in Northern California	Tehama	\$ 80		Lepage Company Inc. is requesting \$800,000.00 to procure a Tigercat 6040 Carbonizer, which is a mobile wood debris conversion system that produces biochar through pyrolysis. Employing the Carbonizer to reduce fuels and create biochar is a multi-solution biomass utilization approach. The Carbonizer will support forest-sector business development, in-woods fuel reduction operations, post-fire forest recovery efforts, employment opportunities, and agricultural communities. Additionally, the biochar generated from the Carbonizer will support the local economy and promote healthy soils in forests and on agricultural lands. Lepage Company will use the Carbonizer to improve operational efficiency while reducing treatment costs, which will help advance the pace and scale of forest resilience efforts in Northern California.
Business Development	Calaveras Healthy Impact Product Solutions	CHIPS Expansion	Amador Calaveras El Dorado Mariposa Stanislaus Tuolumne	\$ 3	17,116	This project contemplates an expansion of Calaveras Healthy Impact Product Solutions (CHIPS). CHIPS' mission is wildfire prevention via fuels reduction and to give any jobs we can create to the disadvantaged community, particularly Native Americans. We currently have 46 crew members configured into five crews working in the LTBMU, Hope Valley, Yosemite National Park and Sequoia Crest. CHIPS desires to add two more 12-person crews to work projects included ithe Upper Mokelumne River Watershed Authority's Forest Projects Plan (FPP) and also Yosemite Stanislaus Solutions' Social and Ecological Resilience Across the Landscape (SERAL) project in the central west slope region of the Sierras. This grant request is to finance the outreach, recruiting, training and equipping of two fuels reduction crews.

CAL FIRE Business	and Workforce De	velopment Grant Appli	<u>cations 2023</u>	Disclaimer: This roster includes all eligible and ineligible project proposals.	
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Loamist	Clean Carbon Hubs	Amador Butte El Dorado Mariposa Nevada Placer Plumas Stanislaus Tuolumne Yuba	\$ 245,000	Loamist proposes the creation of California's first "Clean Carbon Hub", a centralized biomass aggregation facility that supports Carbon Dioxide Removal (CDR) companies, notably those harnessing waste woody biomass for biochar and bio-oil production. Addressing a crucial challenge of cost-effective biomass sourcing, the Hub aims to aggregate supply and demand at the same location, ensuring a daily utilization of 20 bone-dry tons. This approach streamlines operations, lowers costs, and aligns with California's Wood Products and Bioenergy objectives. This grant will fund the development of a detailed business plan, site-selection, permitting, and CEQA considerations fir the first Hub. With strong support from CDR companies interested in the Clean Carbon Hub concept, Loamist's initiative promises to set a precedent in sustainable biomass management.
Business Development	Phoenix Biomass Energy, Inc.	Clean Energy and Water Plant for Calaveras County	Calaveras	\$ 1,200,279	Phoenix Energy is partnering with the Calaveras County Water District to develop a co-located biomass gasification and wastewater treatment plant in Arnold, CA. This demonstration project will be the first of a series of such plants planned that will span the western slope of the Sierra Nevadas. Each co-located plant would produce clean energy from local forest biomass, significantly contribute to the decarbonization of the rural wastewater treatment process, decrease wildfire risk, and sequester carbon in the form of biochar utilized as a filtration and odor control medium for wastewater. Hydrogen production will also be considered as an option. Grant funds would support the planning process, development fees, feasibility studies, engineering studies, CEQA, permits, PG&E connection fees, and community outreach.
Business Development	Hago Energetics Benefit Corporation	Clearing the Forest using a Novel Carbon Negative Hydrogen Production Method	Butte Fresno Ventura	\$ 499,990	This is a research and development project to demonstrate the feasibility of using forest clearing to create green hydrogen. We will convert forest clearings to biochar and use this biochar to produce hydrogen in a methane pyrolysis process. The hydrogen will be used to power a fuel cell mobility device as a prelude to powering heavy duty vehicles. This project will increase forest biomass utilization and facilitate a hydrogen heavy-duty transportation infrastructure in the State of California.

CAL FIRE Business	and Workforce De	velopment Grant Appl	<u>ications</u> 2023	Q3	Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Caribou Biofuels	Deployment and Optimization of the CARIBOU Mobile Biorefinery Platform	Alameda San Francisco San Joaquin Stanislaus	\$ 500,000	We will deploy and optimize the mobile Inclined Rotary Gasifier (IRG) technology under real world deployment conditions at targeted CA sites. This will demonstrate that this mobile IRG conversion platform is a viable technology ready for deployment in CA and validate that the biofuels generated by the unit are drop-in biofuels suitable for use in diesel engines. We will work with CLERE Inc. to obtain all necessary permits and CEQA approvals at all three sites. This project will enable future sales of the CARIBOU platform and will increase both its marketplace impact and environmental benefit to CA. We have identified a manufacturing partner, Flory Industries, as well as industry partners that form the core of our initial business development plan.
Business Development	Mariposa Bioenergy LLC	Developing the Foundation Phase for the Mariposa Bioenergy Facility	Mariposa	\$ 2,000,000	Mariposa Bioenergy, LLC, in collaboration with West Biofuels, Mariposa County Resource Conservation District, Mariposa Biomass Project, and others, seeks funding to complete site grading, preparation of a feedstock area, installation of a fire prevention system, and the fabrication of bioenergy equipment. These activities will be the foundational pieces for deploying a 3 MW forest bioenergy production facility. When fully operational, it will validate economic operation of forest biomass to bioenergy conversion, while providing revenues to support needed biomass capture and transport. Thus, the project will kickstart local and regional forest management practices and jobs markets, and help the region develop a thriving and sustainable forest management industry that minimizes future catastrophic wildfire hazards, provides local jobs, and benefits underserved communities.
Business Development	Ecostrat USA Inc.	Developing Wood Utilization Infrastructure in Plumas County with BDO Zone Rating	Plumas	\$ 100,000	This R&D project will expand wood utilization infrastructure within the historically underserved and distressed region of Plumas County, CA. Specifically, it will recruit, catalyze and support new low-grade wood utilization businesses as well as support existing woody biomass producers and ancillary businesses in Plumas County by strengthening the woody biomass supply chain, establishing a Plumas New Utilization Supply Cooperative (NUSCO), and rating and marketing the region as a Bioeconomy Development Opportunity (BDO) Zone.

CAL FIRE Business	and Workforce De	velopment Grant Appli	<u>cations</u> 2023	Q3	Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Shasta Biofuels LLC	Development of a Commercial Scale Waste Woody Biomass to RNG Biorefinery in Anderson, California	Shasta	\$ 1,695,500	Devastating wildfires and increasing greenhouse gas emissions are two globally important and interrelated issues. Shasta plans to tackle both by building a biorefinery that will utilize substantial amounts of waste woody biomass ("WWB") to help reduce wildfires and produce low-carbon, renewable natural gas ("RNG") that will displace fossil natural gas. Shasta would draw up to 290,000 dry tons per year of WWB from forests in desperate need of thinning (most from sourced from Level 3-5 Priority Landscapes). That would help protect up to 750,000 forested acres and keep 375 million metric tonnes of CO2e in place in forest biomass. Shasta's carbon negative RNG and biochar products will reduce GHG emissions by about 200,000 metric tonnes compared with fossil fuels.
Business Development	Phoenix Biomass Energy, Inc.	Earthworks Biochar LLC Business Development	Amador Calaveras El Dorado Madera Mariposa Placer Sierra Stanislaus	\$ 1,967,590	Phoenix Biomass Energy, Inc. is California's leading developer and operator of community-scale gasification power plants. Two plants are scheduled to come online in 2024-25, each producing clean electricity and biochar from forest biomass. The plants are expected to produce about 5,000 metric tons of biochar each year, sequestering 12,760 metric tons of CO2. This byproduct is a key element of the financial viability of the plants, generating income from biochar sales to customers in the agriculture, filtration, construction, and other emerging markets. Phoenix's subsidiary company, Earthworks Biochar LLC, will manage and direct biochar sales. Grant funds will support hiring staff and the expenses associated with launching this new wood products business.
Business Development	Camptonville Community Partnership	ENGEMAN CAMPTONVILLE GREEN ENERGY/Camptonvill e Community Partnership Bio- energy Facility	Yuba	\$ 1,950,205	Camptonville Community Partnership (CCP) is partnering ENGEMAN CAMPTONVILLE GREEN ENERGY, LP to construct a 5MW biomass bioenergy facility to utilize potential biomass from surrounding forest management and restoration project happening through the North Yuba Forest Partnership and other local contractors planned for the upcoming decades. The Facility will create 18-20 livable wage jobs on top of the environmental benefits. The facility will sell 3 MW to PG&E, use .5+/- MW to power the facility, and will use the remaining MW to power a pellet mill and potentially a sawmill on the campus. Both projects, the pellet mill and sawmill, are in the planning stage.

CAL FIRE Busines	s and Workforce De	velopment Grant Appli	cations 2023		Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	quested unds	Project Description
Business Development	Mendocino Forest Products Company, LLC	Feasibility Analysis of Biomass-to- Power/Hydrogen Plant	Mendocino	\$ 500,000	Mendocino Forest Products proposes to execute the second stage of an engineering study to provide a profitable and environmentally beneficial use of sawmill residuals and expand biomass opportunities. The first stage of the study, funded by CALFIRE in 2022, graded six technology approaches for site suitability, economic potential, and risk profile. Results of the study showed that a combined hydrogen and power plant is the preferred pathway. The next stage, an FEL-2 study, will produce engineering documents for the new plant. Among other deliverables, it will result in a financial model, site assessment, equipment quotations, and permit application preparation. This plant has the potential to derisk and develop the hydrogen marketplace for biomass and increase local biomass utilization capacity.
Business Development	Plumas Wood Fiber LLC	Feasibility Study For Wood Fiber Horticultural Substrate Production From Forest Biomass- Plumas Wood Fiber	Plumas	\$ 126,070	This project is a feasibility study to be conducted by consultants to quantify all aspects of operation for a proposed facility in Plumas County that would process forest biomass into horticultural wood fiber substrate as a replacement for peat moss in potting mixtures. The project intent is to commercialize forest biomass by providing the commercial greenhouse and nursery businesses with material they need for potting mixes. For this to be successful, three areas of operation must be carefully analyzed- feedstock supply and cost in the given geographic area, cost of facility development and operation, and market ability and willingness to accept the volumes of material produced. The Feasibility Study will attain these goals, and provide for further development.
Business Development	Johnson Contracting LLC	Forest Product Transportation Business Development Program	Humboldt Lassen Modoc Shasta Siskiyou Trinity	\$ 150,000	Johnson Contracting LLC will purchase a heavy duty class truck tractor (Kenworth T800 or equivalent) which would increase productivity, efficiency, and environmental sustainability of forest health in Northern California. The purchase of this truck tractor will allow for the transportation of biomass products in chip or chip log form for both our current operation, along with partner companies projects. This vehicle will also create efficient transportation of our existing fuel reduction and biomass operation, allowing us to maneuver between different projects during a limited yearly operating period. Finally, this vehicle will allow us to update our existing transportation operation to fully meet state and federal emissions regulations.

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Project Type	Applicant	Project Name	County	quested Funds	Project Description
Business Development	G.C. Cook Forest Products, Inc.	G.C. Forest Products, Inc. Business Expansion Project	Mono	\$ 164,000	G.C. Forest Products, Inc. is a logging timber operator based in Mammoth Lakes, Mono County with more than 50 years of experience. The company requests grant funds to expand their in-woods fuel reduction operations to include a feller buncher. This equipment will significantly boost GCFP's capacity to harvest material and manufacture their existing wood products, increase the pace and scale of restoration, and support their future pellet mill operations and the region's other emerging wood and biomass utilization facilities. The feller buncher will increase harvest volumes by up to 3,000 ccf per year, improve worker safety, create two new jobs, and advance treatment of an additional 400 acres annually
Business Development	UC Davis	Pinpointing forest ecosystem co- benefits to facilitate bioproduct supply chain partnerships	Butte Tuolumne Yuba	\$ 138,453	To bring stakeholder beneficiaries into multi-benefit partnerships with bioproduct businesses requires pinpointing, quantifying, and valuing ecosystem co-benefits of forest management for biomass utilization. Our bioproduct business partners stand ready to provide us with information on their expected woody biomass supply chain. This data will be integrated with our state-of-the-science ecosystem models, to pinpoint and value co-benefit delivery. We will disseminate the results of these case studies in a 2-page briefing document directed at identified stakeholder beneficiaries of these specific projects, and more broadly, including water agencies, non-profits focused on ecosystem restoration, health foundations, and impact investors. The briefing document will show potential partners the ecosystem return, in dollar-terms, that these projects can deliver, presenting them with valuable investment opportunity information.
Business Development	Spaceman Technologies	Product Discovery - Non-Merchantable Woody Biomass Procurement Software	Placer	\$ 387,200	Spaceman seeks funding for research and development of a software platform that connects contractors and timber operators who produce non-merchantable woody biomass with bioenergy companies and carbon removal suppliers with the technical capabilities to transform these materials into products. By serving both suppliers and buyers of non-merchantable woody biomass, Spaceman can deliver additional revenue streams to suppliers while ensuring supply chain sustainability and transparency for buyers. The proposed scope of work focuses on discovery of user needs, development of a business plan, user experience design and iterative product engineering, culminating in a private Beta phase with early adopters. A statewide product launch and general availability will follow.

CAL FIRE Business	and Workforce De	velopment Grant Appli	<u>ications 20</u> 23		Disclaimer: This roster includes all eligible and ineligible project proposals
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Mote, Inc.	Research and Business Development 2023 Q3 - Mote Fines Processing Technology	El Dorado Kern Statewide	\$ 500,000	The goal of this research and development project is to develop an oxygen-fired boiler for biomass fines with CO2 capture and storage (or 'Oxy-Fuel Fines Boiler', OFFB) for use at carbon-negative biofuels production facilities. The OFFB is an improvement to current and proposed biofuels facilities that has three primary benefits: (1) increases energy efficiency by cogenerating electricity, (2) lowers carbon intensity of the fuel by capturing more CO2 for storage, and (3) manages an otherwise challenging, low-value waste stream. Mote engineers will partner with scientists from Idaho National Lab will accomplish experimental measurement of feedstock properties, assessment of feedstock handling and treatment strategies, market assessment, process simulation, and mechanical design to develop a conceptual design for a prototype deployment.
Business Development	BioFiltro	Research Project: Expanding the use of forest residues for vermifiltration, a sustainable and nature-based wastewater treatment technique adopted by the State of California.	Merced	\$ 498,194	Vermifiltration is a sustainable, all natural, climate-smart, solution for the treatment of wastewater from dairies (manure), food production, wineries, and sanitary wastes. Wood media, in the form of chips, is a vital component of vermifiltration. With the increasing demand for vermifiltration systems in California, establishing sustainable, environmentally beneficial sources of wood media is of paramount importance. BioFiltro seeks to evaluate the suitability of various forest products, focusing on forest residual biomass of limited economic value. The proposed stud will test residual from logging, thinning operations, and forest fires, including various wood species, material sizes, and production methods. The grant funding will be instrumental in running the experimental vermifiltration system in Hickman and in testing and assessing results.
Business Development	Town of Mammoth Lakes	Rural Community Bioenergy Facility for Energy Resiliency & Forest Climate Adaptation	Mono	\$ 2,000,000	The project will provide relief surrounding key resource management concerns and climate-related challenges by deploying forest biomass to a newly-built energy conversion facility in Town of Mammoth Lakes (TOML) servicing Mono County's entirety. Proposed systems ensure 100% renewable power provision throughout these remote regions to enhance energy supply resilience, mitigate catastrophic wildfire occurrence, and better support communities. TOML Census Tract 06051000101 was targeted for its disadvantaged community destination paired with high susceptibility to risk from environmental burdens including: Expected building/population loss rates caused by fatalities/injuries resulting from natural hazards. A coordinated deployment structure streamlining implementatio processes at the community bioenergy facility enables TOML to capitalize on economies of scale in an industry where large geographic distances have constrained such benefits.

CAL FIRE Business	and Workforce De	velopment Grant Appl	ications 2023	Q3		Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	_	uested unds	Project Description
Business Development	Cal Forest Nurseries, Inc.	Scaling California Cone Collection & Seed Processing	Statewide	\$	592,500	The emerging regime of severe and frequent fires threatens California conifer seed supply as mature trees die in fire and thus impacting downstream seedling availability. For this project, Cal Forest Nurseries and Mast Reforestation propose to build a robust seed supply by collecting 5,000 bushels of cones and processing upwards of 30,000 bushels for customers, over the next four years that would yield over 23,000 pounds of seeds. The seeds processed by Cal Forest will made available to other federal, state and tribal entities, and private landowners, and grown into seedlings that will replace the fire-impacted forest stands.
Business Development	Regenerative Forest Solutions	Sonoma County Woody Feedstock Pilot Project	Sonoma	\$	234,994	Regenerative Forest Solutions' (RFS) research will create a feasibility study and business plan for the creation of a biomass aggregation entity and processing facility to increase jobs, wood products viability, and fuel load reduction projects across Sonoma County. The pilot was recently selected under North Coast Resource Partnership's (NCRP) Forest Biomass Strategy and will leverage local, regional and state expertise to investigate the opportunities to manage fiber flow within the North Bay. In Sonoma County's highly parcelized landscape, viability of biomass aggregation, processing and bundling of contracts will be researched as pathways to enable new business creation, provide a reliable market to increase fuel-load reduction projects, and generate opportunity for jobs in the wood products and forest sectors.
Business Development	Ascent Forestry	Technology Forward Forest Health Management	Mariposa	\$	500,000	Ascent will purchase a John Deere high through-put harvester with Cut-to-Length capabilities and a Forwarder with grapple. Equipment will be outfitted with integrated mapping software to better document treatments applied to each acre in the project and manage the workflow in real time. Ascent will bring a new remote-controlled masticator to allow for mastication on steeper and more technical slopes. The trio of equipment will compliment Ascent's current forestry operations, expanding capabilities in High Risk, including urban WUI's throughout the State of California.

CAL FIRE Business	s and Workforce De	velopment Grant Appli	cations 2023	Disclaimer: This roster includes all eligible and ineligible project proposals.	
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Business Development	Kodama Systems	Two-shift Forest Thinning Operations	Tuolumne	\$ 420,000	The opportunity to decrease operational costs through improved machine uptime is well-recognized within the heavy industry. 24-hour equipment operation is near-universal across the mining industry, and two-shift forest management is common in the hardwood forests of northern Maine and eucalyptus plantations of Brazil. Yet, no operations in the western U.S. leverage the benefit of multiple shifts. Kodama proposes "skidding and decking as a service" for our forest thinning project partner after its main crew concludes daily operation, typically around 3:30 pm. Kodama's service will consist of skidding, delimbing, bucking, and decking logs overnight. The goal is to prove a new business model in forest management that doubles site productivity and leverage machinery that improves operational uptime.
Business Development	Woodland Biomass Power, LLC	Woodland Biomass Power Grinder Project	Yolo	\$ 1,001,667	Woodland Biomass Power, LLC is seeking to expand its current onsite grinding capabilities by installing a new electric grinder (including electrical upgrades required to support the grinder and additional mobile equipment to move logs). The expansion of onsite grinding seeks to alleviate the bottleneck created by the existing infrastructure that prevents chip trucks from effectively accessing log sites and will allow the company to process additional cull logs from priority areas. This ground wood will then be used as fuel to generate electricity instead of being disposed by burning in the forest.
Workforce Development	The University of California, Agriculture and Natural Resources	Building a replicable talent pipeline for the Bioeconomy	Fresno Kings Tulare	\$ 5,000,000	Driven by industry demand and in partnership with educational institutions and the public workforce system, this project will establish a talent pipeline management framework to ensure the development of a sustainable, replicable, public-private integrated talent pipeline model to strengthen the bioeconomy workforce in the San Joaquin Valley, which can be replicated throughout California. Through career awareness in the education sector, workforce boards designating the bioeconomy as a demand occupation, and engagement of employer-led organizations, this program will develop a robust bioeconomy training program meeting industry demand for a well-qualified workforce. Nationally recognized industry certifications, apprenticeships, and for- and not-for- credit programs will cover a wide variety of forestry and processing career opportunities related to all areas of the bioeconomy sector.

AL FIRE Business and Workforce Development Grant Applications 2023 Q3					Disclaimer: This roster includes all eligible and ineligible project proposals.
Project Type	Applicant	Project Name	County	Requested Funds	Project Description
Workforce Development	BurnBot, Inc.	Building a Tech- forward Fuels Management Workforce in California	El Dorado San Bernadino Shasta Statewide	\$ 4,872,970	BurnBot will setup an independent, first-of-its-kind, technology-centric training program for fuel treatment with 3 centers that produce 150 skilled & trained workers. Participants will cover coursework for UAS pilot, HFEO, FEMA and NWCG certifications along with hands-on apprenticeships. Participants will learn fire safety principles, technology skills, including drone operations, aerial ignition, heavy machinery, remote-operated mastication, blacklining operations and field software for fuels mapping. This project is unique in that it is statewide in scale, provides technology training for both mastication & prescribed fire treatments, provides students hands-on experience in both forestry & wildland-urban-interface environments, addresses the shortages in workforce capacity today, and provides technology training and skills for many career options, amplifying California's capacity to meet its fuel reduction objectives.
Workforce Development	Black Oak Mine Unified School District	Building Today's Forestry and Fire Workforce with an Award-Winning CTE Program	El Dorado	\$ 434,050	The Black Oak Mine Unified School District is committed to expanding our current slate of Career Technical Education (CTE) programs with the Building Today's Forestry and Fire Workforce with an Award Winning CTE Program. Our project seeks to create a Forest Product Utilization and Innovation CTE program in two phases: In Phase One, BOMUSD will acquire a small, portable sawmill and loader to support courses in Industrial Arts and Environmental Science. BOMUSD will partner with industry leaders and regional Community Colleges to develop an expanded curriculum for implementation in Phase Two, which will include new course offerings and certifications in arborist training/line clearing, heavy equipment operation, advanced sawmill operations and wood utilization, plus electives in Fire Sciences and Renewable Energy.
Workforce Development	American Forests	Cone Camps: Workforce Training for Future Forests	Statewide	\$ 474,358	The training and education provided by the "Cone Camps: Workforce for Future Forests" (Cone Camps) grant proposal is designed to equip individuals with essential skills in cone monitoring and collection. The curriculum focuses on practical knowledge and hands-on experience, ensuring participants are well-prepared for reforestation efforts. The proposed project builds upon the existing framework of the Cone Camps piloted in 2023 in partnership with the California Department of Forestry and Fire Protection, the USDA Forest Service Region 5, and the American Forests' Reforestation Pipeline Partnership team.

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Workforce Development	Resilience Force CA, LLC	Indigenous and Immigrant Farmworkers Building a Forest Resilience Workforce in the North Bay	Lake Sonoma	\$ 994,578	This project requests funding to put on a paid Spanish language training series that will equip 45 Spanish-speaking Immigrant and Indigenous farmworker residents with the experience to take on fuels management work in Sonoma County. Over the course of the 18 months, participants will complete 23 trainings covering a variety of forest health management skills, representing 250 hours of education and up to 5 NWCG certificates awarded per worker. Through collaboration with training partners Audubon Canyon Ranch/Fire Forward, the Watershed Center, Tribal EcoRestoration Alliance, and other local and regional entities, these meaningful training opportunities will create a knowledgeable local workforce, expand equitable long-term career opportunities for underserved communities, and serve as a replicable model for workforce development in the area.
Workforce Development	Quartz Valley Indian Reservation	Quartz Valley Surge Capacity Fire and Fuels Project	Siskiyou	\$ 495,404	This \$500,000 project provides fire and fuels training and professional development to 100 people over three years, with 11,400 training hours, about 300 certificates earned, and higher qualifications achieved for five Tribal employees. Three two-week fire academies to be hosted on Quartz Valley Indian Reservation (QVIR) will meet the needs of rural, underserved communities, increasing local capacity for fuels management, fire suppression, and prescribed burning. These fire academies close to home will make training more accessible for QVIR and surrounding communities, but will also be open to others around the state. This grant will also support travel to and participation in regional prescribed fire training exchanges (TREX events) to help trainees gain hands-on experience in different terrain and fuel types.
Workforce Development	The Forestry and Fire Recruitment Program	Scaling Capacity for Fuels Reduction Worker Training	Statewide	\$ 4,528,939	The Forestry and Fire Recruitment Program (FFRP) is a 501 (c) (3) that provides career support to people returning home from California's Conservation Camps and are interested in careers in the forestry sector. FFRP's mission is to increase wildfire personnel from underrepresented communities - providing them the training needed to secure gainful employment, while contributing fire prevention services statewide. Since 2015, the organization has helped 175+ people transition into professional careers within the sector. Funding from CAL FIRE would support FFRP in three crucial areas: (1) train and place 350 people over the 4-year grant period; (2) add capacity to programming staff through establishment of FFRP hub and training center in Malibu; and (3) provide immediate fire prevention services throughout California.

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Workforce Development Workforce Development Workforce	Project Type	Applicant	Project Name	County	-	Project Description
Workforce Development			Development and Training in Plumas County for Forest	Plumas	\$ 500,000	community members to prepare post-fire lands for reforestation. The workforce training will focus on creating wildfire-resilient parcels through fuel treatment, invasive species removal, cultural fire, selective logging, and the introduction of more diverse forest communities with an emphasis on culturally significant native species. Maidu Summit Consortium has 2,934 acres to use for training the work crew on post-fire reforestation and Green Forest Management. Weather will play or role in how early the work crew can start to work and how long their season will
Workforce Development Working Group Working Group Workforce Development Working Group Working Group Workforce Development Working Group Working Group Statewide Statewide Wildfire Resilience Action Plan. The Working Group is composed of a broad and diverse set of private business, industry, academic, tribal, community, and workforce agency representatives. The Working Group will commission independent research and analysis to ider workforce needs and gaps, identify job creation potential, and project the economic and social benefits of implementing the 2024 Action Plan. The strategies developed will comprise a roadmap for expanding workforce		,	Heavy Equipment Logging Operations	Tuolumne	\$ 1,669,928	Maintenance training program (through work-based learning and certification) to help with workforce development for HELO. By contracting with Columbia College to provide Contract Training, this will develop an industry recognized certificate. Work-based learning will be held at the worksites of current and ongoing fuel reduction projects through the County. This will be "next level" in the career path for the Greater Sierra Forestry Corps graduates that have initial HELO training provided and decide to advance their careers through continued workbased learning in HELO positions. For workers who didn't go through the corps and already have Forestry experience, they can go straight into HELO, and take the full
			Task Force - Workforce Development	Statewide	\$ 160,914	composed of a broad and diverse set of private business, industry, academic, tribal, community, and workforce agency representatives. The Working Group will commission independent research and analysis to identify workforce needs and gaps, identify job creation potential, and project the economic and social benefits of implementing the 2024 Action Plan. The strategies developed will comprise a roadmap for expanding workforce