### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



### NOTICE OF PROPOSED AWARDS

Development, Demonstration and Deployment of Environmentally and Economically Sustainable Biomass-to-Energy Systems for the Forest and Food Waste Sectors GFO-15-325

Amended May 4, 2017

On June 27, 2016, the California Energy Commission (Energy Commission) released a two-phase competitive solicitation to fund applied research and development (AR&D) activities and technology demonstration and deployment (TD&D) activities to advance bioenergy electricity generation. This solicitation is responsive to the Governor's 10-30-2015 Proclamation of a State of Emergency to protect communities against unprecedented tree die-off. Up to \$23 million in Electric Program Investment Charge (EPIC) funding is available to fund applications in:

- Group 1: AR&D: Efficient, Sustainable and Lower-Cost Bioenergy: Innovations to Improve Woody Biomass-to-Electricity Systems (\$5,000,000)
- Group 2: TD&D: Demonstrate and Evaluate Environmentally and Economically Sustainable Woody Biomass-to-Electricity Systems (\$10,000,000)
- Group 3: TD&D: Demonstrate and Evaluate Environmentally and Economically Sustainable Food Waste Biomass-to-Electricity Systems (\$8,000,000)

The Energy Commission received fifty-seven abstracts by the due date of September 8, 2016. Twenty-eight abstracts passed phase 1 screening and the Energy Commission received a total of twenty-three phase 2 proposals by the due date of December 21, 2016. Each proposal was screened, reviewed, evaluated and scored using the criteria in the solicitation. All twenty-three proposals passed the Administrative Screening.

The attached <u>amended</u> table titled "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score. The total amount recommended for all groups is \$23,000,000 \$33,721,278.

Funding of proposed projects resulting from this solicitation is contingent upon the approval of selected projects at a publicly noticed Energy Commission Business Meeting and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel or otherwise modify the pending award, and award the funds to another applicant.

In addition, the Energy Commission reserves the right to: 1) add to, remove, or shift funding to make additional awards and 2) negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

This notice is being mailed to all parties who submitted an application to this solicitation and is also posted on the Energy Commission's website at: <a href="https://www.energy.ca.gov/contracts/">www.energy.ca.gov/contracts/</a>.

For information, please contact Crystal Presley-Willis at (916) 654-5067 or Crystal.Presley-Willis@energy.ca.gov.

Crystal Presley-Willis
Commission Agreement Officer



### **California Energy Commission**

GFO-15-325

Development, Demonstration and Deployment of Environmentally and Economically Sustainable Biomass-to-Energy Systems for Forest and Food Waste Sectors

### **Notice of Proposed Awards**

Group 1: Efficient, Sustainable and Lower-Cost Bioenergy: Innovations to Improve Woody Biomass-to-Electricity Systems

	March 24, 2017 May 4, 2017								
Rank	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status		
PROPOSED AWARDS									
1	All Power Labs, Inc.	The Nexus of Clean Energy, Healthy Forests, and a Stable Climate: Innovative Biomass Gasification for Sustainable Forest Management	\$1,500,000	\$1,500,000	\$750,000	88.5	Awardee		
2	Taylor Energy	Biomass-to-Electricity: Pilot-Scale Testing of Baseload Compared to Flexible Power	\$1,499,000	\$1,499,000	\$0	81.6	Awardee		
3	University of California, Davis	An Online Application for Decision Support in Siting Woody Biomass-to-Electricity Facilities in California	\$1,222,284	\$1,222,284	\$29,665	76.4	Awardee		
4	Altex Technologies Corporation	Small Scale Forest Waste Power System	\$1,499,994	<del>\$778,716</del> \$1,499,994	\$161,728	75.5	Awardee		
Total			\$5,721,278	\$ <del>5,000,000</del> \$5,721,278	\$941,393				
PASSED B	UT NOT FUNDED								
5	Lawrence Berkeley National Laboratory	Mitigating Fire Risk and Climate Change by Matching Forest Biomass Resources with Community Infrastructure, Energy Demand, and Power Generation Opportunities	\$1,500,000	\$0	\$0	74.8	Finalist		
Total			\$1,500,000	\$0	\$0				
DID NOT PA	ASS								
	The Regents of the University of California on behalf of Berkeley campus (Renewable and Appropriate Energy Laboratory)	Quantifying Co-Benefits of the Electricity Generation from Woody Biomass and Expanded Forest Treatment	\$1,410,524	\$0	\$0	Did Not Pass			
	Biogenic Energy, LLC	Woody Biomass to Electricity via Supercritical Water Oxidation	\$1,500,000	\$0	\$336,160	Did Not Pass			
	University of California, Riverside	Development of Efficient Conversion Process from Woody Waste to Electricity by Steam Hydrogasification	\$860,000	\$0	\$0	Did Not Pass			
	InnoSepra, LLC	Biomass Gasification and Cleanup for Power Generation with Higher Efficiency & Lower Emissions	\$1,500,000	\$0	\$313,267	Did Not Pass			
	Clean Energy Systems, Inc.	Negative Carbon Biomass	\$1,497,806	\$0	\$532,334	Did N	ot Pass		
Total \$6,768,330				\$0	\$1,181,761				
	Grand Total Requested, Recommended and Proposed Match (Group 1) \$13,989,608 \$5,000,000 \$5,721,278								



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### **Notice of Proposed Awards**

Group 2: Demonstrate and Evaluate Environmentally and Economically Sustainable Woody Biomass-to-Electricity Systems

Group 2: Demonstrate and Evaluate Environmentally and Economically Sustainable woody Biomass-to-Electricity Systems  March 24, 2017 May 4, 2017									
Rank	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status		
PROPOSED	PROPOSED AWARDS								
1	Mariposa County Resource Conservation District (MCRCD)	Mariposa Biomass Project	\$5,000,000	\$5,000,000	\$11,135,367	88.0	Awardee		
2	ICF Incorporated, L.L.C.	Camptonville Biomass-to-Energy Project	\$4,999,830	\$4,999,830	\$13,030,225	86.8	Awardee		
3	Fall River Resource Conservation District	Burney Hat-Creek Bioenergy	\$5,000,000	\$5,000,000	\$5,000,000	85.5	<del>Finalist</del> Awardee		
4	Sierra Energy	Sierra Energy's FastOx Gasification of Biomass to Renewable Electricity in the Central Sierras	\$5,000,000	\$5,000,000	\$5,498,712	84.8	Finalist Awardee		
Total			<del>\$9,999,830</del> \$19,999,830	<del>\$9,999,830</del> \$19,999,830	<del>\$24,165,592</del> \$34,664,304				
PASSED BUT NOT FUNDED									
5	All Power Labs, Inc.	Rapid Response to California's Tree Mortality Crisis: Biomass Gasification Feed-In-Tariff Projects at Auberry Mill, Chinese Station, and Camino	\$3,000,000	\$0	\$2,100,221	83.4	Finalist		
Total			\$3,000,000	\$0	\$2,100,221				
DID NOT PA	ASS 	T							
	Tuolumne County Economic Development Authority	Tuolumne County Biomass Power and Biochar Project	\$5,000,000	\$0	\$10,000,000	Did N	ot Pass		
	Sierra Institute for Community and Environment	Indian Valley Community Energy Facility	\$5,000,000	\$0	\$4,403,012	Did N	ot Pass		
Total			\$10,000,000	\$0	\$14,403,012				
	Grand Total Requested, Recommended	\$32,999,830	\$ <del>9,999,830</del> \$19,999,830	\$51,167,537					



# **California Energy Commission**

GFO-15-325

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### **Notice of Proposed Awards**

Group 3: Demonstrate and Evaluate Environmentally and Economically Sustainable Food Waste Biomass-to-Electricity Systems

March 24, 2017 May 4, 2017

Rank	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
PROPOSED AWARDS							
1	HZIU Kompogas SLO Inc.	Kompogas SLO	\$4,000,000	\$4,000,000	\$4,968,353	91.5	Awardee
2	University of California, Davis	Demonstrating the Potential for On-Site Electricity Generation from Food Waste Using Containerized Anaerobic Digestion Units	\$2,411,007	\$2,411,007	\$753,859	84.7	Awardee
3	Lystek International Limited	Skid Mounted Mobile Pilot/Education Unit for Source Separated Organics Processing with Cogeneration Capabilities	\$2,400,000	\$1,589,163	\$600,000	79.2	Awardee
Total			\$8,811,007	\$8,000,170	\$6,322,212		
DID NOT PA	T						
	Rialto Bioenergy LLC	Rialto Bioenergy Facility Integrated TD&D Project	\$4,000,000	\$0	\$4,281,640	Did N	ot Pass
	Agromin Corporation	Agromin Bioenergy Program	\$4,000,000	\$0	\$19,638,015	Did N	ot Pass
	South Bay Cities Council of Governments	Sustainable Food Waste Biomass-to-Electricity for Transportation Sector Demonstration Project within South Bay Cities of Los Angeles County	\$2,345,975	\$0	\$871,423	Did N	ot Pass
Total			\$10,345,975	\$0	\$24,791,078		
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	Grand Total Requested, Recommended and Proposed Match (Group 3)		\$19,156,982	\$8,000,170	\$31,113,290		
Grand Total Requested, Recommended and Proposed Match (Groups 1-3)		\$66,146,420	\$ <del>23,000,000</del> \$33,721,278	\$84,403,981			