

CALIFORNIA ENERGY COMMISSION

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

**July 25, 2014****PON-13-301****Stage 1 Results****Developing a Portfolio of Advanced Efficiency Solutions: Technologies and Approaches for More Affordable and Comfortable Buildings**

On March 21, 2014, the California Energy Commission (Energy Commission) released a competitive grant solicitation to fund the research and development of next generation end-use efficiency technologies and strategies for the building sector. Up to \$25 million in Electric Program Investment Charge (EPIC) funding is available to fund applications in the following groups:

- Group A: Building Energy Efficiency Technology, and Codes and Standards Advancement
- Group B: Direct Current Applications for Future Zero Net Energy Buildings
- Group C: Roof Deck Insulation Analysis for New Residential Zero Net Energy Buildings

The solicitation was structured as a two-stage solicitation process. Applicants must pass Stage 1 in order to proceed to Stage 2.

Stage 1 was a request for abstracts, which consisted of an eight (8) page project abstract (along with additional supporting documents). Each abstract was reviewed, evaluated, and screened using the Stage One Abstract Screening Criteria (Part IV, Section E). Each application must pass all listed criteria to progress to Stage 2. The attached table identifies all applicants that passed Stage 1 and may submit formal proposals in Stage 2.

This notice is being mailed to all parties who submitted an abstract to this solicitation and is also posted on the Energy Commission website:
www.energy.ca.gov/contracts/.

For further information, please contact Angela Hockaday at (916) 654-5186 or at Angela.Hockaday@energy.ca.gov.

Sincerely,

Angela Hockaday
Commission Agreement Officer



California Energy Commission
Developing A Portfolio of Advanced Efficiency Solutions:
Technologies and Approaches for More Affordable and Comfortable Buildings
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 Stage 1 Results



Abstract Number is used for internal tracking and does not represent ranking of the submitted abstracts.

Group A

Abstract Number	Applicant	Project Title	Pass/Not Pass
1	Keravanos Energy LLC	Keravanos Demand Reduction Technology	Not Pass
2	Cold Machines, Inc.	Monitoring and Management of HVAC Systems on Small to Medium Commercial Bldgs.	Pass
4	City of Santa Monica	Smart City Street Light Project	Not Pass
5	Sextant Foundation	Natural Ventilation in Healthcare	Not Pass
6	University of California, Los Angeles	Developing a Decision-making Tool for Strategic Implementation of Permit Reforms: Ground-truthing GridLabD to California's Electrical Feeders	Not Pass
7	University of California, Los Angeles	Advanced solid-state cooling modules and associated holistic and predictive control/integration schemes for high efficiency zonal air conditioning	Pass
8	Pacific Northwest National Laboratory	Improving the Operating Efficiency of Small Commercial Buildings and Enhancing Grid Reliability through an Innovative Solution	Pass
9	The Regents of the University of California	Whole Home Thermal Integration of a Residential Heat Pump for Efficient Site Resource Utilization	Not Pass
10	The Regents of the University of California; University of California, San Diego	Smart and Retrofittable Building Envelope Energy Saving Structures	Not Pass
11	University of California, Los Angeles	Dynamic Materials and Systems for energy efficient and comfortable buildings	Not Pass
12	Oak Ridge National Laboratory	Field evaluation of prototype residential air-source integrated heat pump (AS-IHP) concept in range of CA climates	Pass
13	Oak Ridge National Laboratory	Enhancing the Durability of White Single Ply Wood Roof Coverings On Low-Sloped Wood Decks in California	Pass
14	Lucent Optics, Inc.	Advanced building interior lighting using daylight-redirecting glazing, energy-efficient luminaires and luminaire-dimming controls	Pass



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15	Prospect SV	Advanced Ventilation Optimization for Centrally Controlled HVAC Buildings	Pass
16	The Regents of the University of California	Towards Commercial Solar Thermal Cooling-A Net-Zero-Energy Building Demonstration	Not Pass
17	The Regents of the University of California	Developing an Advanced LED Lighting System that Enhances Building Occupant Well-Being	Not Pass
18	Gas Technology Institute	Solar Hybrid Cooling and Domestic Hot Water	Pass
19	Philips Lumileds Lighting Company LLC	Innovation for Disruptive Efficacy and Cost Improvements of CRI 90 LEDs and LED Lamps	Pass
20	The Regents of the University of California; University of California, San Diego	INVITE24: Innovative natural ventilation-Implementation in Title 24	Pass
21	CREE, Inc.	"Novel High-Efficacy, Low-Cost LED Luminaires"	Pass
22	Next Energy Technologies	Advanced Windows and Film Utilizing Semitransparent Printable Organic Small Molecule Semiconductors: A Low Cost Energy Efficiency and Energy Generation Solution	Pass
23	The Regents of the University of California	Toward ZNE Buildings with Advanced Control Technologies for HVAC Systems and Renewal Energies	Not Pass
24	The Regents of the University of California, on behalf of the Riverside Campus	LED-Based Visible Light Communication and Navigation Techniques and Testbed to Dramatically Accelerate Market Adoption of LED Lighting	Not Pass
25	Integral Group, Inc.	Image-Based Photosensor for Lighting Control M&V	Not Pass
26	University of Southern California	Behavior-Driven Energy Management Systems	Not Pass
27	The Levy Partnership, Inc.	Development of Point Source, Integrated Mini-Split Heat Pump (IMHP) System for High Performance Homes	Not Pass
28	Institute of Gas Technology dba Gas Technology Institute	Innovative Technology for Building Heating, Cooling and Power Needs	Not Pass



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29	Energy Institute at Haas, University of California, Berkeley; The Regents of the University of California	Very low-cost MEMS-based ultrasonic anemometer for use indoors and in HVAC ducts	Pass
30	Energy Institute at Haas, University of California, Berkeley; The Regents of the University of California	Optimizing Radiant Systems for Energy Efficiency and Comfort	Pass
32	Bay Area Air Quality Management District	Integrated Combined Cooling Heat and Power with Waste Heat Recovery	Not Pass
34	LED Lighting Company	2 X 2 LED Panel with Battery and Control Emergency Lighting and Demand Response	Not Pass
35	Empowered Solutions, LLC	The Commercial Auto Demand Response Enhancement (CADRE) Project	Not Pass
36	Convergence Wireless, Inc.	Standard Fluorescent Troffer LED retrofit	Not Pass
37	The Regents of the University of California; University of California, San Diego	Sustainable Buildings: Intelligent Energy Resource Management for Buildings	Not Pass
38	Brightbox Technologies, Inc.	Autonomous Model-Based Building Commissioning	Pass
39	InTech Energy, Inc.	Energy360 Occupancy Analytics, Prediction Control	Not Pass
40	Fujitsu Laboratories of America	Human-Centric Information and Communication Technologies for Energy Efficiency and Demand Response	Pass
41	OxiCool, Inc.	Molecular Sieve and Water Based Air Conditioning System	Not Pass
42	KEMA Services, Inc.	Office Energy Savings and Component Compatibility	Not Pass
43	NexTint, Inc.	Full scale production and demonstration of energy-saving electrochromic retrofit films	Not Pass
44	Pacific Northwest National Laboratory	Smart Performance Monitoring and Fault Detection System for Residential Air Conditioners and Heat Pumps	Pass
45	Composite Support & Solutions, Inc.	Energy Saving Curtain Wall Framing Based on Fire-Resistant Composite Material	Not Pass
46	View, Inc.	Dynamic In-Fill: A Low-Cost High-Efficiency Windows Upgrade Technology	Pass



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47	Avogy Inc.	Universal USB-PD wall outlet power supply for plug loads	Pass
48	The Regents of the University of California, Irvine Campus	Negotiating Energy Efficiency in Home Entertainment Systems: Personalized Multi-device Coordination	Pass
49	The Regents of the University of California; University of California, San Diego	Wet Roof-a bioinspired design of cooling buildings	Pass
50	University of Southern California	Enabling a Smart Monitoring and Actuation System for Increased Energy Efficiency in Residential Buildings	Not Pass
51	The Regents of the University of California on behalf of the California Institute for Energy and Environment	OpenBAS: Providing Comfortable and Energy Efficient Commercial Buildings Through Affordable HVAC, Lighting, and Plug Control	Pass
52	SeeVider Inc.	SeeVider Smart Vision Systems for Energy Efficiency lighting controls	Not Pass
53	Energy Institute at Haas, University of California, Berkeley; The Regents of the University of California	Identifying Energy Efficient Opportunities in Commercial Buildings with Remote Audits	Not Pass
54	Silicon Valley Leadership Group	Advanced Multi-Function Streetlight Control Systems and Smart City Networks	Not Pass
55	Robert Bosch LLC	Bosch Advanced Lighting Platform for Improved Efficiency, Reliability, and Cost	Not Pass
56	Enovative Group, Inc.	Whole-Unit Device-Level Monitoring and Switching	Not Pass
57	Eureka Materials Scientific Inc.	Affordable Water-Based Coating for Window Heat Insulation	Not Pass
58	AGGIOS, Inc	Mobile Efficiency for Plug Load Devices	Pass
59	CleanTECH San Diego	City As A System: Energy Efficiency Solutions	Not Pass
61	New Buildings Institute, Inc.	A Radiant Future for California Low-Energy Buildings	Not Pass
62	The Regents of the University of California, Santa Barbara	Occupancy-aware operations for optimizing building comfort, energy, and demand response	Not Pass



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63	Coherent Lighting Solutions, Inc.	Retrofittable Three- Reflector Sun-tracking Daylighting System	Pass
64	Regents of the University of California	Low-cost GHP retrofits using horizontal drilled ground loops: The development and testing of packaged ground-sourced heat pumps for space conditioning and domestic hot water heating using horizontal directional drilling ground heat exchanger loops for residential and light commercial building retrofits	Pass
66	Sustainable Community Development Institute (SCDI)	Development of Innovative Materials and Advanced Building Envelope Systems	Not Pass
67	National Renewable Energy Laboratory (NREL)	Modular Refrigeration Waste Heat Recovery	Not Pass
68	National Renewable Energy Laboratory (NREL)	Developing an Efficient, Reliable, and Cost Competitive Switched Reluctance Motor for HVAC Applications	Pass
69	The Regents of the University of California; University of California, San Diego	Closing the Loop: A Holistic Framework for Efficient, Human Centric Building Management	Not Pass
70	Glint Photonics, Inc.	Passive-Tracking Concentrator Daylighting System	Pass
71	Lawrence Berkeley National Laboratory	Integrating Occupant Behavior in the Design and Operation of Commercial Buildings	Not Pass
72	Lawrence Berkeley National Laboratory	Developing Flexible, Networked Lighting Control Systems That Reliably Save Energy	Pass
75	Lawrence Berkeley National Laboratory	Solar-Reflective "Cool" Walls: Benefits, Technologies, and Implementation	Pass
76	Lawrence Berkeley National Laboratory	Residential HVAC Technologies for Zero Net Energy Homes	Not Pass
77	Lawrence Berkeley National Laboratory	Innovative HVAC Technologies for California's Buildings	Not Pass
78	Lawrence Berkeley National Laboratory	High-Performance Integrated Window and Facade Solutions for California Buildings	Pass
79	Lawrence Berkeley National Laboratory	Guaranteed Performance: Enabling Accountability for Low-Energy Buildings	Not Pass



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80	Lawrence Berkeley National Laboratory	A Comprehensive Strategy to Reduce Plug Load Electricity Use: Observable, Controllable, and More Efficient	Pass
81	SeaKay, Inc.	Advanced Building Energy Efficiency Control System Testbed for Medium to Small Buildings	Not Pass
82	The Regents of the University of California, on behalf of the Riverside Campus	Design, Implementation and Grid Integration of Energy Efficient Buildings by Co-Scheduling of HVAC system Distributed Energy Sources	Not Pass
84	RMS Energy Consulting, LLC	Walk-in Cooler and Freezer of the Future	Pass
85	Bidgely, Inc.	Bidgely Advanced Analytics to Increase Conservation	Not Pass
86	Fisher-Nickel, Inc.	Proposal for Study of Behavior Change in Commercial Foodservice Operations	Not Pass
87	Home Energy Analytics Inc.	Energy Reduction Methods Utilizing the Smart Meter Analytics Residential Trials (SMART) Program	Not Pass
88	CalCERTS Inc.	Quality Insulation Installation and Interactive Verification and Data Recording	Not Pass
89	The Regents of the University of California, Irvine Campus	Educational Energy Monitoring Software System: Monitoring Behavior Change in Residential Energy consumption	Not Pass
90	Benz Air Engineering, Co., Inc.	Open Cycle Absorption-Cycle Heat Pump For Domestic Climate Conditioning, Water Heating And Purification	Not Pass
91	Regents of the University of California, Davis - California Lighting Technology Center	From the Laboratory to the California Marketplace: A New Generation of LED Lighting Solutions	Pass
92	Regents of the University of California, Davis - California Lighting Technology Center	Optimized Daylight Harvesting	Pass
93	Bright Foot Print	Bridging the Gap: a Case-Quality Demonstration Program Opportunity Notice 13-301	Not Pass
94	Modula S Inc.	Modula S Advanced Building Envelope Systems, Materials & Components	Pass
96	Earth Networks, Inc.	Energy Aware Application Platform for Large Scale Energy Efficiency	Not Pass
97	Quantum Energy Services & Technologies, Inc. (DBA: QuEST)	EnergyOP	Not Pass
98	Bruce Wilcox, P.E.	Central Valley Research Houses Evaluate Emerging Technology Performance and Title 24 Compliance Algorithms	Not Pass



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99	Bruce Wilcox, P.E.	Field Study of Residential HVAC Installation Issues and Emerging Technology Performance	Not Pass
100	Technikon, Inc.	Dispatchable Aggregated Evaporative Cooling systems for commercial HVAC systems to reduce energy loads during peak demand periods	Not Pass
101	Association for Energy Affordability	Advanced HVAC and Sub-metering Options for Multifamily Buildings	Not Pass
102	Benningfield Group, Inc.	The Next Generation Dynamic Modular Wall: Moving Toward ZNE Envelopes	Pass
103	The Regents of the University of California (University of California, Davis)	Technologies To Improve The Effectiveness Of Residential HVAC: A Multi-Center Trial In Different Household Types	Pass
104	The Regents of the University of California (University of California, Davis)	Low Cost, Large Diameter, Shallow Ground Loops for Ground-Coupled Heat Pumps	Pass
105	The Regents of the University of California (University of California, Davis)	Managing Airflow in Large Buildings	Pass
106	Electric Power Research Institute (EPRI)	Climate appropriate innovations for VRF Systems: adaptive cloud controls, advanced refrigerants, Dedicated Outdoor Air Systems (DOAS) & indirect evaporative cooling enhanced heat recovery ventilation	Pass
107	Electric Power Research Institute (EPRI)	Development and Testing of the Next Generation Residential Space Conditioning System for California	Pass
108	Electric Power Research Institute (EPRI)	Intelligent HVAC controls for Low Income Households: A low cost non-connected device that understands consumer preferences and performs adaptive optimization	Pass
109	Electric Power Research Institute (EPRI)	Energy Savings Potential of Multimedia Devices in California: an Integrated, Context-aware Optimization Approach	Not Pass
110	Electric Power Research Institute (EPRI)	Fulfilling the Promise of EISA: Capturing the Remaining Incandescent Lamp Savings Opportunities	Not Pass
111	Electric Power Research Institute (EPRI)	Evaluating Residential Consumer Behavior to Reduce Plug Load Energy Use	Not Pass
112	Tranquility America, Inc.	Next Generation Absorption Chiller Development	Pass
113	Geo Solar Systems	Next Generation Geothermal Heat Pump Technology Utilizing a Natural Refrigerant (CO2)	Pass



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114	Energy Institute at Haas, University of California, Berkeley; The Regents of the University of California	Pre-Commercial Behavior Research Methods Applied to Take-up and Use Advanced Air Conditioning Technologies	Not Pass
115	PIE Systems International, Inc.	Data-driven HVAC energy efficiency optimization using Complex Events Processing and Data Mining technologies	Not Pass
116	LO3 Energy	Combined Heat and Computing	Not Pass
117	Coil Winding Specialist, Inc.	CWS PTAC Refit Kit	Not Pass
118	Coil Winding Specialist, Inc.	CWS Peak Saver	Not Pass
119	Smart Grid Billing, Inc.	Education Solutions with Advanced Real-Time Automated Monitoring and Control Energy Management and Demand Response Technology with Simple User Interface Integrated with Customizable Student Learning Apps	Not Pass
122	RST Cellars LLC	Advanced Efficiency Solutions for Winery Building Envelope	Not Pass



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Group B

Abstract Number	Applicant	Project Title	Pass/Not Pass
3	Recargo, Inc.	EV-to-Home for Zero Net Energy	Not Pass
33	Kroger Company	The Ralph's Supermarket Solar Conversion Project	Not Pass
60	The Regents of the University of California, Irvine Campus	Direct Current Applications for Future ZNE buildings with Vehicle Charging and Distributed Generation	Not Pass
65	Peak NRG	Enhanced DC Nanogrid Demonstration with Networked Distributed Energy Storage	Pass
73	Lawrence Berkeley National Laboratory	Direct Current as an Integrating and Enabling Platform	Pass
83	RMS Energy Consulting, LLC	Implementing DC Distribution to Improve Overall Lighting System Efficiency in Buildings with Solar Photovoltaic Collection	Not Pass

Group C

Abstract Number	Applicant	Project Title	Pass/Not Pass
31	BIRA Energy	Energy Efficient and Cost Effective Attic Design Suitable for New Homes in Hot and Dry and Moderate but Moist CA Climates	Pass
74	Lawrence Berkeley National Laboratory	Comparing Attic Approaches for ZNE Homes	Pass
95	Modula S Inc.	Modula S Advanced Building Roof Deck Insulation Panel Systems	Not Pass