

FOR IMMEDIATE RELEASE

CONTACT: Tenley Dalstrom
Tenley@Calcef.org

September 24, 2018

California Clean Energy Fund Awards Another \$2.7 Million to 2018 CalSEED Concept Winners

The [California Clean Energy Fund](#) is pleased to announce the latest Concept Award recipients of the [California Sustainable Energy Entrepreneur Development](#) (CalSEED) program which the California Clean Energy Fund administers on behalf of the Energy Commission.

The [California Energy Commission](#) approved nearly \$2.7 million in grants for this year's group of innovators and entrepreneurs working to bring early-stage clean energy concepts to market. These 18 new grants of \$150,000 bring the total number of CalSEED Concept Awards to 46 over the last two years.

These 18 projects were selected from a field of more than 400 applicants for CalSEED, which is the Energy Commission's initiative to invest in novel solutions to energy challenges. The selected grants will fund a wide range of research projects across energy sectors including energy storage, transportation and energy generation.

"This is an exciting time to be working on clean energy technologies, especially in California," said California Clean Energy Fund Managing Director Danny Kennedy. "We are thrilled to be keeping entrepreneurs at the epicenter of the climate solutions engine that will propel California towards a 100%+ clean energy economy for the 100%."

The CalSEED initiative will provide \$24 million in grants over five years to support innovators working on early-stage clean energy concepts.

"Given California's ambitious energy and climate change goals, we need clean energy entrepreneurship at unprecedented levels. CalSEED helps put California's clean energy entrepreneurs on a path towards successful commercialization of their innovation." said Energy Commission Chair Robert B. Weisenmiller.

The CalSEED funds come from the Energy Commission's Electric Program Investment Charge (EPIC) Program, which invests about \$120 million annually for innovative clean energy technologies and approaches and that benefit California's three largest electric investor-owned utilities.

In addition to Concept Award funding, the CalSEED program connects awardees to entrepreneurial training organizations, nonprofits, companies, universities and clean energy incubators. CalSEED awardees gain technical expertise, mentoring, and business development opportunities through this robust clean energy ecosystem.

"As the new Director for California Programs at the California Clean Energy Fund, I am thrilled to be facilitating the critical work of our CalSEED awardees. The state of California is at the forefront of supporting the development of innovative approaches to mitigate and address the impacts of climate change. The urgency of this work cannot be understated, and our dedicated entrepreneurs are tackling the issue with their drive and creativity" said California Program Director Tenley Dalstrom.

Below are the 18 projects, each of which will receive up to a \$150,000 grant:

Perigo Welding Works

Perigo Hybrid Low Pressure Water Filtration System



Perigo Welding Works is developing comprehensive hardware component that will significantly reduce the operating pressure of current high pressure agricultural micro/drip irrigation systems.

DTE Materials Incorporated

DTE Engineered Cellulose Insulation Storage



DTE Materials Incorporated is developing natural fiber additives for building insulation that will improve the performance, fire resistance, and cost of existing insulation materials.

Stasis Group

Ducted Phase Change Material Cooling Proof of Concept



STASIS GROUP INC

Stasis Group is developing a ducted Thermal Energy Battery (TEB) for integration into a HVAC systems that aims to reduce the amount of energy required to regulate indoor temperature.

Empow Lighting

LED Lighting Film for Low-Cost Retrofits of Fluorescent Lights



Empow Lighting is developing thin and flexible LED lighting sheets that will be snapped onto existing fluorescent light fixtures as a solution for upgrading linear fluorescent lights to LEDs.

University of California, Riverside

Doubling Biomethane Production Rate from Anaerobic Digestors



The University of California, Riverside is developing a patented fluidic oscillation system that will introduce CO₂ microbubbles into the digester that doubles the renewable methane production rate.

Ocean Motion Technologies

Hydrokinetic Power Buoy for Local and Grid-Scale Generation and Storage



OCEAN MOTION TECHNOLOGIES

Ocean Motion Technologies is developing a modular mechanical buoy system that can harness oceanic wave energy and store it in compressed air or utilizes it for electricity production through a turbine generator.

Smartville Energy

Low-cost, Easy-to-integrate, Reliable Grid Energy Storage with 2nd Life Batteries



Smartville Energy is developing an innovation to efficiently reuse electric vehicle batteries in large quantities, and at the same time provide low-cost, easy-to-integrate and reliable energy storage solutions to the electricity grid

University of California, Riverside

Graphite-coated High Energy Density Powder



The University of California, Riverside is developing a novel high-capacity silicon-carbon composite that can be used as a “drop-in” replacement of graphite in commercial lithium-ion batteries.

Crossno & Kaye, LLC

Automated Load Sculpting for Heavy Industries



Crossno & Kaye, LLC is developing an innovative refrigeration technology with increased energy efficiency and load shifting capabilities that uses an algorithm to safely overcool a temperature-controlled space at times of peak efficiency.

ETC Solar LLC

Invisible Front Contacts for Solar Cells



ETC Solar LLC is developing Effectively Transparent Contacts (ETCs) that will reduce the levelized cost of electricity (LCOE) of PV systems by mitigating shading losses, and thereby increasing the power output of solar cells by 5%.

Cal State University Fullerton

Low-Cost Portable Smart Bio-Mimicking Solar Shrub



Cal State University Fullerton is developing self-learning solar evergreen shrub that intelligently configure itself based on environmental factors including change in incident sunlight, temperature, and weather to improve efficiency.

Pronoia, Inc.

Pronoia Energy Storage Device



Pronoia, Inc. is developing a novel battery that functions without electrolyte and separator, and is not only be rechargeable, but also will have minimal capacity loss with continued cycling.

Pick My Solar

SolarBlock



Pick My Solar is developing an online application for community solar developers to reduce their soft costs by providing a customer-relationship management platform specifically designed for community solar project developers.

InPipe Energy

In-PRV (Pressure Recovery Valve) Renewable Energy Generator



InPipe Energy is developing a technology that combines smart software controls, sensors and hardware components that works with the existing pressure reducing valves (PRVs) to generate renewable energy and precisely manage pressure in water pipelines.



SkyCool Systems

SkyCool Panels

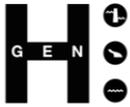
SkyCool Systems is developing a rooftop, radiative sky cooling panel that improves the efficiency of air conditioning and refrigeration systems through a passive method for cooling that is enabled by a patented multilayer optical coating.



PARC, a Xerox Company

Adaptive current-collectors for high-efficiency electric vehicles

This PARC project is developing an innovation that will improve the safety of high-energy batteries and increase vehicle efficiency by as much as 20% by converting internal short-circuits from a catastrophic to a graceful failure mode.



GenH

Mobile Envelope Dam Electrification System (MEDES)

GenH is developing a Mobile Envelope Dam Electrification System (MEDES), which is the first of its kind mobile, rapidly deployable, up-and-over technology for dam/hydraulic head electrification.



FerroPower Technologies

Near-Isothermal Liquid Piston Air Compressor/Expander with Magnetically stabilized Ferrofluid

FerroPower Technologies is developing a near-isothermal air compressor/expander system that improves the performance and cost of Compressed Air Energy Storage (CAES) by replacing the solid piston of conventional gas compressor with a ferrofluid-based liquid column.

About the California Clean Energy Fund

The California Clean Energy Fund has been accelerating clean energy innovation and startup ecosystems for more than a decade. Its vision is to create a 100%+ clean energy economy for the 100% by driving entrepreneurial innovation and building equity into the clean energy economy. Since its founding in 2004, it has leveraged \$1.5 billion, invested directly in more than 100 clean energy enterprises and launched industry leading solution centers.

CalSEED funding is made possible by the California Energy Commission's Electric Program Investment Charge (EPIC) Program, which invests approximately \$120 million annually for innovative clean energy technologies and approaches and that benefit the ratepayers of California's three largest electric investor-owned utilities.