

DOCKETED

Docket Number:	17-EPIC-01
Project Title:	Development of the California Energy Commission Electric Program Investment Charge 2018 â€“ 2020 Triennial Investment Plan
TN #:	216611
Document Title:	The ETCC Rocket Fund Also Helps Cleantech Entrepreneurs
Description:	N/A
Filer:	System
Organization:	Stephanie Yanchinski
Submitter Role:	Public
Submission Date:	3/20/2017 1:20:07 PM
Docketed Date:	3/20/2017

Comment Received From: Stephanie Yanchinski

Submitted On: 3/20/2017

Docket Number: 17-EPIC-01

The ETCC Rocket Fund Also Helps Cleantech Entrepreneurs

We wish to draw your attention to another program innovation that is assisting California cleantech entrepreneurs with some success. The Rocket Fund, <http://www.flow.caltech.edu/rocket-fund>, established in 2015 by the Emerging Technology Coordinating Council consortium of California utilities, the California Institute of Technology and the Moxie Foundation has added a vital adjunct to the CalSEED and Technology Cluster programs and the ecosystem they foster. For the low-margin utilities, scaling challenges mean they need to see a functioning pilot in the field. There are few funds available for Very Early Stage (VES) companies such as those emerging from the CalSEED program to bridge the gap between a lab-tested widget and commercially viable product. The Rocket Fund provides small grants to fill the gap, and aided by a unique collaboration with utility experts can accelerate cleantech products to their markets faster.

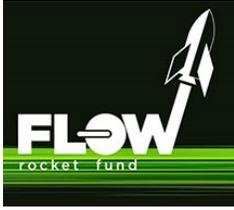
The Rocket Fund's core program is based on the concept that for VES cleantech companies, small but smart grants, coupled with direct assistance by potential customers, will shape technologies into products faster and more reliably. The fund works with industry specialists and the company to "de-risk" the technology, rendering early stage companies more attractive to potential customers, investors and partners. The model is technology and region agnostic, and provides a unique vehicle for industry to work with the tech community to bring cleantech products to market. In this way, the Rocket Fund can enhance the work of the Tech Clusters.

Run as a pilot for two years, analysis revealed the Rocket Fund's promise: recipients completed building their Minimum Commercial Prototype, established collaborations with future customers (Walmart, Whole Foods, Google, and the Hilton Hotel Chain, among others) and received further funding, either from federal commercialization agencies or private investors. One company raised \$2.5 million and secured a \$5 million customer contract. http://resnick.caltech.edu/n_rocket.php.

Currently the Rocket Fund can fund only a relatively portion of the qualified prospects that apply and is seeking to expand its funding base through public private partnerships.

The FLOW/Rocket Fund Office 03.20.17

Additional submitted attachment is included below.



The Emerging Technology Coordinating Council's Rocket Fund

The Rocket Fund is a *cross cutting grant program* with a solution for one of the most intractable problems preventing cleantech innovations from reaching the marketplace. This is the lack of funding and necessary commercial partners for building and testing a *minimum commercial product (MCP)* that demonstrates and validates pre-products in the real world. This challenge emerged as a vital need from five years of running FLOW www.flow.caltech.edu, an entrepreneurship program for starting cleantech companies launched in 2011 with DOE funding, and from work with the Emerging Technologies Coordinating Council (ETCC, <http://www.etcc-ca.com/> a consortium of California's six major utilities). This barrier was also highlighted by a survey conducted by the Department of Energy's *EERE's Tech-to-Market unit* in fall 2016, where it ranked within the top 3 for every respondent type.

For the low-margin utilities, scaling challenges mean they need to see a functioning pilot in the field. There are few funds available for Very Early Stage (VES) companies (post technology development but pre-pilot stage) to bridge the gap between a lab-tested widget and commercially viable product. Government research grants and incubator programs tend to target proving technology, rather than commercial product design and field testing. Corporate venture funds and investors still remain too far downstream. The Rocket Fund provides small grants to fill the gap, and aided by a unique collaboration with utility experts, to accelerate cleantech products to their markets much faster.

In this way the Rocket Fund forms a vital adjunct to the CalSEED grant program. It provides timely support for CalSEED-funded entrepreneurs (using CalSEED starting capital to develop their ideas into proof-of-concepts and early prototypes) by providing adjunct capital to build and demonstrate their minimum commercial product with customers. The Rocket Fund also enhances the entrepreneurial suite of services offered by the Innovation Clusters. Together, CalSEED, the Tech Clusters and Rocket Fund create a seamless ecosystem that foster energy innovations at all Technology Readiness Levels.

Progress to Date:

The Rocket Fund has provided key funding to VES companies for building a Minimum Commercial Prototype (MCP), while working with future customers. Operating as a pilot since 2015 with a unique group of partners that includes the ETCC, the Moxie Foundation <http://moxiefoundation.org/> (a private foundation fostering innovation and entrepreneurship) as well as Caltech, the Fund made four awards of \$20,000 in early 2016. (See http://resnick.caltech.edu/n_rocket.php). In 2017 the Rocket Fund granted a further five awards and will track their progress over the next four month.

Analysis revealed the Rocket Fund met its initial goals: recipients completed building their MCPs, established collaborations with future customers (Walmart, Whole Foods, Google, and the Hilton Hotel Chain, among others) and received further funding, either from federal agencies or private investors. One company raised \$2.5 million and secured a \$5 million customer contract with a major utility.

Further evaluation suggests that coupling small but targeted grants for vital product development, with direct assistance from individuals in utilities who understand how new technologies access the market, helped the VES companies “de-risk” the technology. This rendered early stage companies more attractive to potential customers, investors and partners. In addition, the pilot results indicate that the model is also technology and region agnostic, and provides a unique vehicle for industry to work with the tech community to bring cleantech products to market.

As a pilot, the Rocket Fund is small, and can fund only approximately 25 per cent of the “A” proposals and with only a fraction of what will be needed to fully realize their MCP. With additional funding it will be possible to establish an expanded Rocket Fund that will increase the number of companies that can be fully funded and validate the Rocket Fund model on a large, sustainable scale. For these reasons, the Rocket Fund is seeking broader support from public as well as the private sectors.

The FLOW Office 03.20.17

The Caltech logo consists of the word "Caltech" in a bold, orange, sans-serif font.