

Rocket Fund – A Grant Program for Connecting with Customers



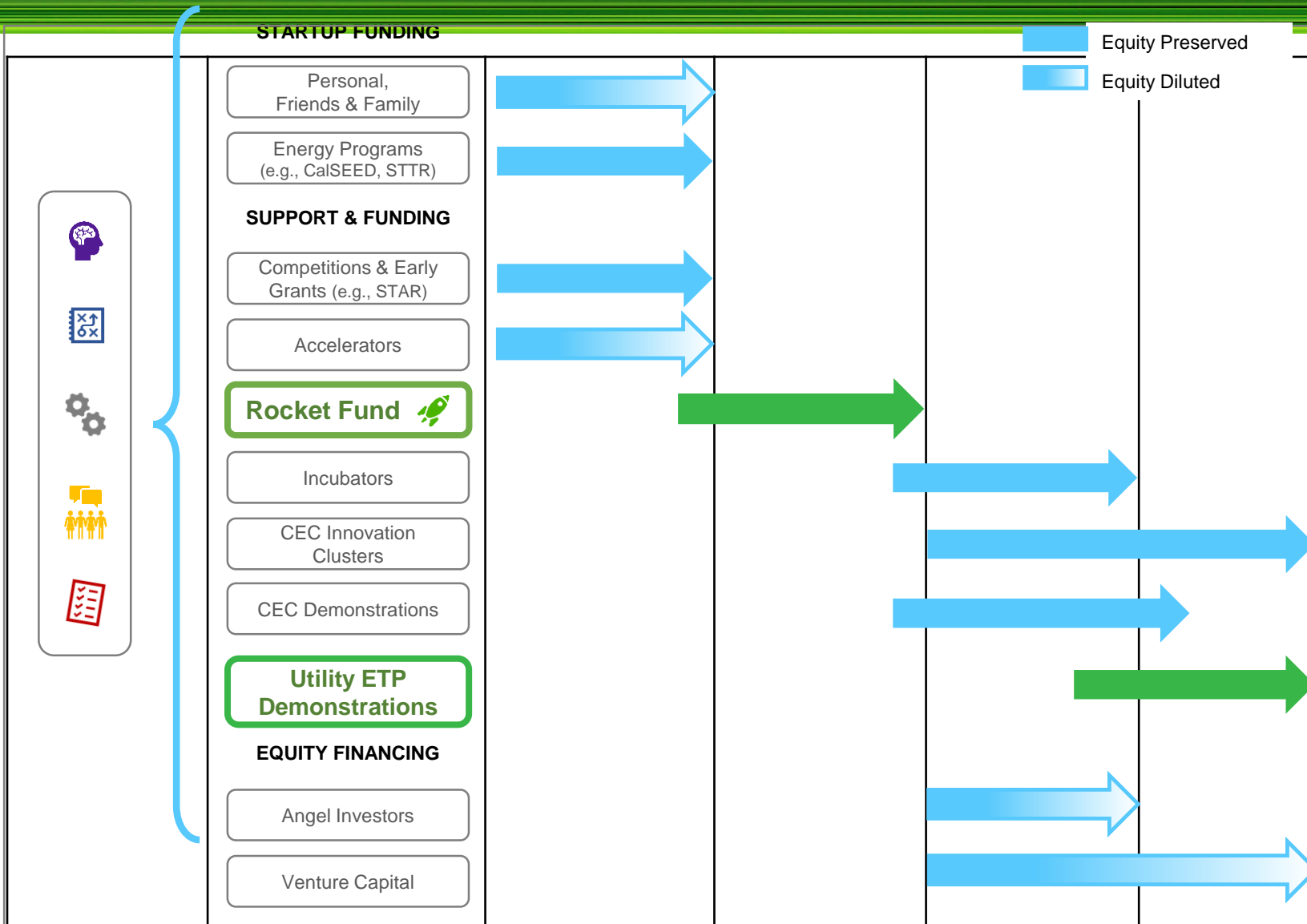
Rocket Fund

Founded 2015: by Emerging Technologies Coordinating Council of utilities, the Moxie Foundation and Caltech

Need: identified from 1,000 entrepreneurs

To date: 19 grants, over \$600,000 awarded

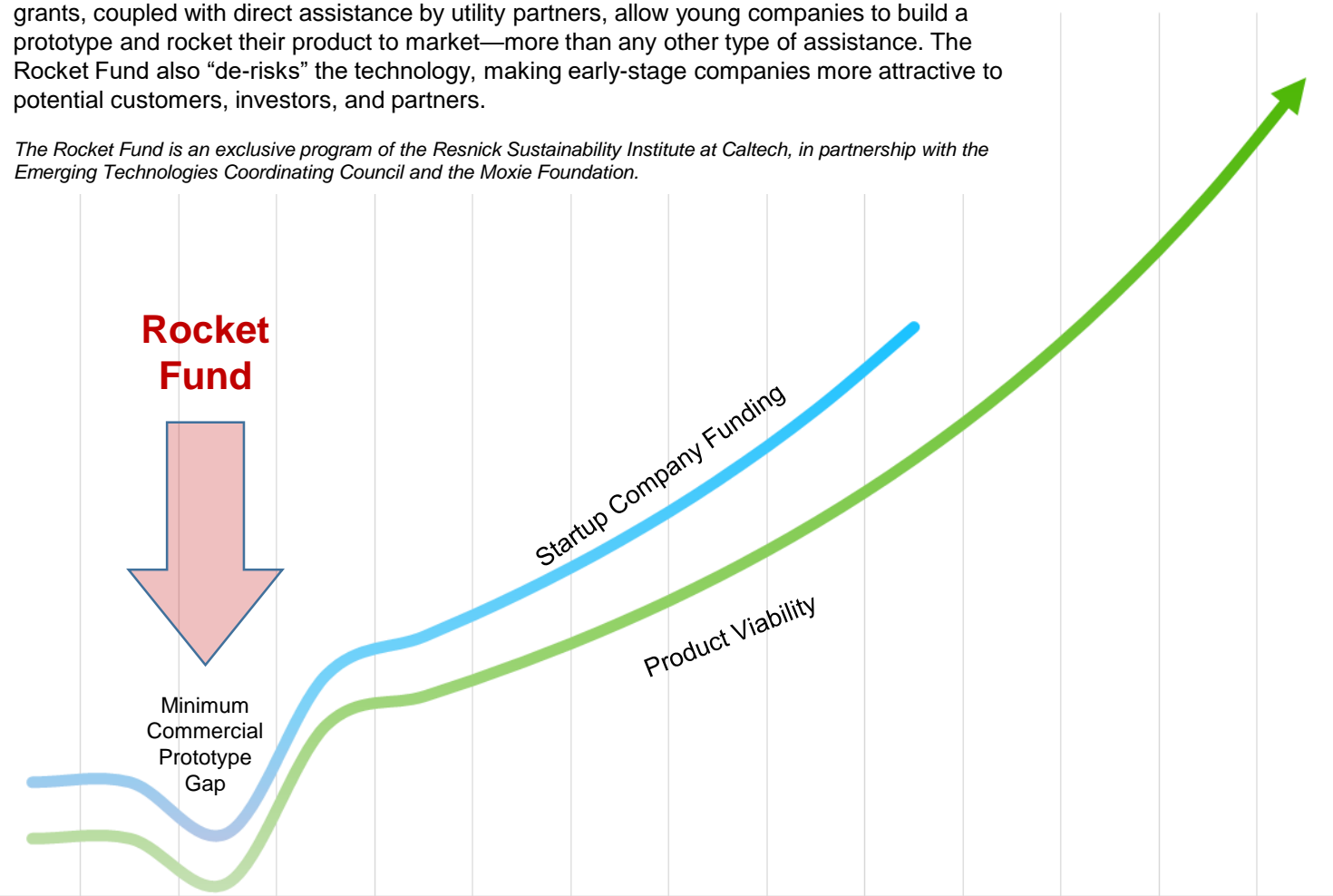




The Rocket Fund is a unique granting pool that helps cleantech startups by closing the funding gap between lab-tested widget and commercially viable product. Our small and smart grants, coupled with direct assistance by utility partners, allow young companies to build a prototype and rocket their product to market—more than any other type of assistance. The Rocket Fund also “de-risks” the technology, making early-stage companies more attractive to potential customers, investors, and partners.

The Rocket Fund is an exclusive program of the Resnick Sustainability Institute at Caltech, in partnership with the Emerging Technologies Coordinating Council and the Moxie Foundation.

STARTUP COMPANY FUNDING



PRODUCT VIABILITY

TIME TO FIRST PRODUCT REVENUE

Company Wins

- CalSEED: BK Litec, ETC Solar, Fluency Lighting, PowerFlex, ETC Solar, South 8
- Axiom Exergy (refrigeration): raised \$12.5 m; \$5 m customer contract/Con Edison
- X-Stream Trucking: (advanced transportation) raised \$2.5 m; launched second product platform
- Membrion: (membranes for fuels cells): raised \$2.3 m in funding
- SkyCool Systems: \$1.77 CEC/EPIC grant

Free, Fast, Flexible

- \$25,000 - \$75,000 grants, non-directed, unencumbered
- No IP required, non-dilutive
- Fast : application to award – 6 months (maximum)
- Flexible: minimal reporting requirements
- Work with utility experts who understand the market
- Access to utility matching funds, testing facilities

Rocket Fund Scope

- Equipment, parts purchase
- Engineering design and prototype building
- Software programming – grid data & management; IOT
- Certification services and validation testing
- Consulting – scale up and manufacturing

Rocket Fund Technologies

Energy Track:

Energy efficiency
Energy Storage
Smart and Microgrid
Distributed Energy Resources (DER)
Data Analytics and Energy Management
Zero Net Energy
New: Industrial heat and thermal storage
New: AI and Cleantech, Robotics

Sustainability:

Renewable Energy generation – wind, water, sun
Waste heat conversion
Biofuels
Advanced transportation
CO2 mitigation
Desalinization
Energy efficient materials
Agriculture/Water/energy nexus
Additive Manufacturing

Details: Caltech's [First Look West \(FLOW\)](#), Rocket Fund page, Application Guidelines

Rocket Fund Process

Apply: <http://www.flow.caltech.edu/rocket-fund>

- Three-stage application process
- Technology Advisory Committee and Review Panel of Experts
- Timeframe: application to award - six months
- Operates like any grant: set milestones against payments
- Project timeline: 9 – 12 months from award
- Multiple applications welcome but not in same year

Stage 1: Application

What we look for:

Validated Lab/Garage Technology: TRL 4

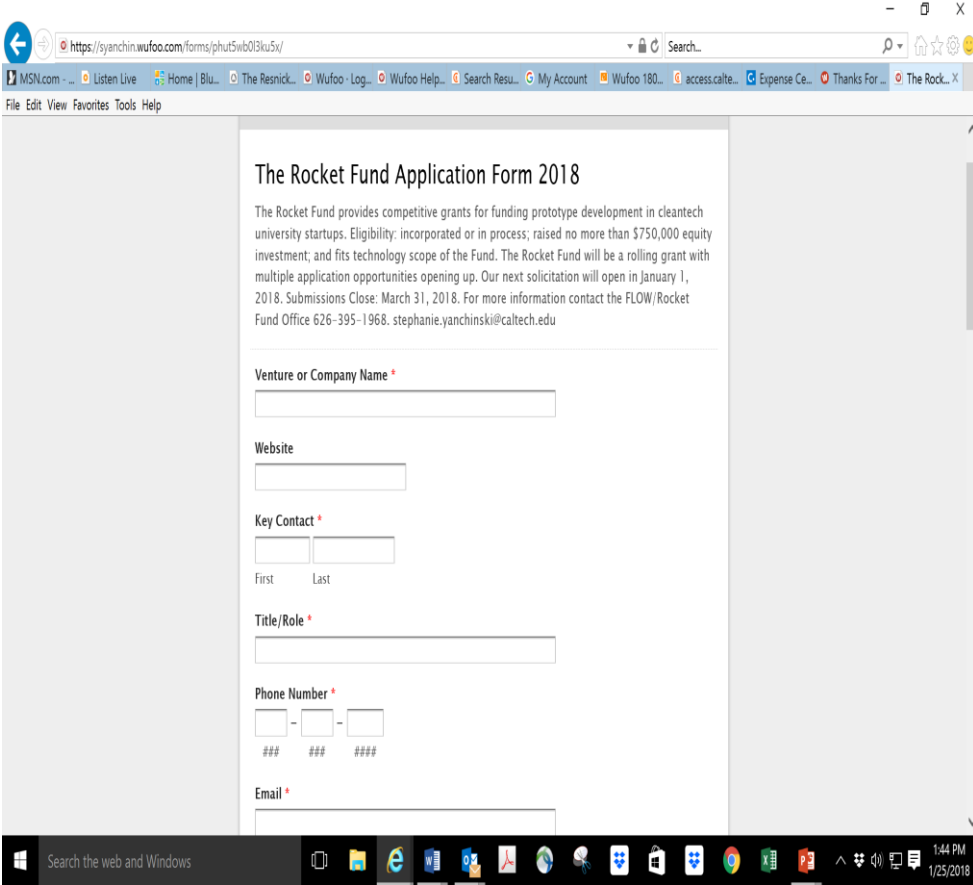
Competitive Value Proposition

Market size: MVP, TAM and SAM

Customers identified

Staged Use of Rocket Funds

Deadline: May 1, 2019



The screenshot shows a web browser window displaying the "The Rocket Fund Application Form 2018" page. The page content includes a title, a paragraph of text describing the fund's purpose and eligibility, and a form with several input fields. The form fields are: "Venture or Company Name", "Website", "Key Contact" (with sub-fields for "First" and "Last"), "Title/Role", "Phone Number" (with sub-fields for area code and number), and "Email". The browser's address bar shows the URL "https://syanchin.wufoo.com/forms/phut5wb0l3ku5v/". The Windows taskbar at the bottom shows the date and time as "1:44 PM 1/25/2018".

Stage 2: Due Diligence

What we look for

Technology Development

- Technology/product, how it works lifecycle position, IP

Manufacturing Process

- How to scale to full production

Customer, Industry Partners, Path to Commercialization

- Describe target customer base and problem, competition
- Customer demonstration Site
- After successful demo: how product will reach the marketplace

Economic , Business, Market Outlook

- Market size, market share: TAM, SAM, Beachhead

Impact

- Energy savings, impact on greenhouse gases, water use

Use of funds: staged

Rocket Fund Application 2018- Due Diligence Worksheet

Entity Information				
Entity Name				
Entity Type				
Entity Description	Group/Division/Lab name			
Technology Name				
Company Info				
	Website			
	Year Founded			
	Primary Location (i.e. HQ)			
	Company Status			
	Funding Stage			
	Primary Contact			
	Name			
	Title			
	email			
	Phone - Work			
	Phone - Mobile			
General - Organization				
	Solution Type			
	Market Tag(s)			
	Policy Tag(s)			
	Key Words			
Recent News (link)				
	This is required, if available.			
Assessment Summary				
Prelim - Technology Assessment	EPRI	Self	Agg	
Technology Readiness Level (TRL)				0
Manufacturing Readiness Level (MRL)				0
Time to Commercialization (yrs)				0
Key Insight/Impact				
Key Limitations				
Signpost				
Next-Steps, Opportunities for Engagement				

Stage 3: Pitch Day

Rocket Fund Review Committee – Utility, Cleantech Business

What We Look For:

- Technology validation, performance data
- Clearly articulated customer & market focus, plan of attack
- Outline of plans for field trials with customers
- Use of funds –staged in \$75k, \$50k, \$25k tranches
- Manufacturing plan including cost analysis of eventual product

The ask: how we can help – utility technical support, testing, connections to potential customers

Stage 4: After the Win

Negotiation

Memorandum of Understanding -
non-legally binding

Agreed Goals and Milestones,
payment schedule, timetable

Metrics: energy savings, # field
trials, # customers & LOIs,
additional funding attracted

Reporting

Quad Report: quarterly

Teleconferences: quarterly

Metrics – end of project, one year later

Payments: will depend on hitting milestones

Rocket Fund 2019 Dates

- May 1: Application Deadline, Semi-Final Selection
- May 3 – May 15: Stage 2 Due Diligence
- May 16 – May 31: Technology Advisory Committee Review
- June 1 – June 15: Finalists Present to Review Panel at Caltech
- June 16 – June 30: Awards, MOU Negotiation, Finalization

Rocket Fund Benefits: Channel Partnerships



Rocket Fund Successes

- 3 companies - multi million dollar customer contracts
- 4 companies – raised close to \$20 m in investment
- 5 companies - \$ 1 million+ in CEC, ARPA-e, SBIR grants
- 5 CalSEED Awards, one follow on prototyping award

Contact Us

- Caltech's First Look West (FLOW) Website: <http://www.flow.caltech.edu>, Rocket Fund
- Caltech: Stephanie.Yanchinski@caltech.edu