Guidelines for Rocket Fund Applications – 2024

Deadline: By 11.59 pm Friday March 1, 2024. Information: stephanie.yanchinski@caltech.edu
Awards: $25,000 - $100,000, with opportunities for additional funding

Eligibility: Incorporated or in process; $3 million equity investment cap at Rocket Fund application deadline; companies closing a round during RF process are still eligible; faculty, students, new graduates post-doctoral researchers as well as garage entrepreneurs welcomed; fits technology scope of Rocket fund tracks, listed below; national and international companies may apply but with goal of establishing California presence; demonstration site with either customer or accepted "gold standard" lab testing facility, either arranged or being finalized; company strategic RF goal : open up beachhead (SOM) market that leads to customer orders or new investment; estimated timeframe for designing and building the first commercial prototype for demonstrating: 12 months from time of receiving the award. Software platforms qualify if they are innovative and fit within and support the RF tracks sectors

We look for:

- Strong, third-party validated technologies (e.g., patents, university research, DOE national lab e.g., NREL, ARPA-E or Electric Power Research Institute (EPRI) data, utility field testing or UL certification) or innovative software platforms with early demonstration of market value
- Clear idea of the value proposition of the product, market segments and target customers for establishing your beachhead (early adopter) niche
- Well-defined use of Rocket Funds with a potential customer providing a test site for your technology demonstration

Diversity and Inclusion: In 2021 the Rocket Fund established a commitment to strengthening diversity and female leadership as well as to spreading the benefits of cleantech and sustainability more broadly to disadvantaged or underserved communities. A significant portion of the scoring during the competition will address this challenge. Please ensure you describe fully your company's commitment to diversity and inclusivity, preferably as part of the business model: current leadership and recruitment initiatives; technology impact with wide adoption of your product, partnership initiatives or corporate policy changes that indicate you are considering how to enhance your approach to this challenge.

Scope: The Rocket Fund provides competitive grants for funding early commercial prototype development (TRL 5 – 7, DOE*) in cleantech and sustainability startups. Rocket Fund covers: Initial prototype design, build out and installation; equipment purchase; consulting support for specialized tasks such as programming user interfaces and manufacturing process development, product engineering and scale up; technology certification; testing by "gold standard" laboratories or services, recognized by your potential customers for technology/product validation and manufacturing.

Rocket Fund 2024 Tracks

Track 1: Building Technologies	Track 2: Transportation
Advanced Insulation materials/installation	Alternative fuels including biofuels
Advanced window technology	Decarbonized construction equipment
Demand response/demand flexibility	Electric Vehicles
Efficient lighting	EV battery technology
Hot water system technologies	EV charging
Innovative HVAC/cooling systems	Fuel cell electric vehicles
Low carbon building materials & coatings	Hydrogen fueling
Nanogrids/backup power systems	Low/no emissions trucking
Smart electric panels/breakers	Off-road - rail, marine, aviation
Smart energy management systems/controls & automation	Onboard hydrogen storage
Smart/efficient appliances	Smart logistics - shipping efficiency, data tracking
Technology for adoption/behavior change	Vehicle to grid, vehicle to building & vehicle to home charging
Track 3: Energy Technologies	**Track 4: Agricultural & Food Technologies**
Battery electricity storage - grid scale	Agriculture management platforms & controls
Electric grid security	Crop yield improvement/resilience
Fuel Cell technology	Fertilizer production innovation & alternatives
Geothermal energy	Food production technologies
Grid+pipeline coupling	Indoor/urban agriculture
Hydrogen storage	Precision agriculture/soil sensors
Long duration energy storage	Smart Farm Equipment
Microgrid systems	Soil amendments
Pipeline monitoring/management	Waste biomass utilization
Renewable electricity generation	Water management advancements
Renewable heat generation	
Renewable hydrogen production	
Renewable synthetic fuels - electrofuels	
Technology for grid design/planning/operations	
Waste to energy	
Track 5: Water	**Track 6: Climate and Environment Technologies**
Anaerobic digestion	Air quality management technologies
Desalination	Carbon dioxide removal (air/water capture)
Grey water	Carbon dioxide sequestration, repurposing & storage
Low pressure membrane technology	Carbon utilization
Management & Controls - Commercial	Environmental cleanup
Management & Controls - Residential	Industrial decarbonization - chemicals, iron & steel, cement, food/beverage
PFAS elimination	Material reuse/recycling
Photocatalytic innovation	Methane emissions - detection, elimination, repurposing
Waste water processing	Wildfire management
Water system filtering & purification	
Water power technologies	

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Schedule:

Rocket Fund 2024 Timetable

	Completion Date	Time
Applications close	**Friday, 3/1**	**11.59 pm**
Stage 1: Initial screening	**3/2 - 3/9**	
Notification of Semi-Finalists	**3/10**	
Stage 2: Semi-Finals		
Candidates complete due diligence forms	**3/11 - 3/25**	**11.59 pm**
TAC Review Meeting	**Friday, 4/26**	**10.30 am - 12.30 pm**
Finalists notified	**5/11**	
Presentation Preparation	**5/12 - 5/24**	**11.59 pm**
Stage 3: Finals		
Rocket Fund Finals Day 1 - Presentations (virtual)	**Monday, 6/3**	**8.30 am - 1.00 pm**
Rocket Fund Finals Day 2 - Presentations (virtual)	**Tuesday, 6/4**	**8.30 am - 1.30 pm**
Notification of Awardees	**Friday, 6/7**	

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* From the Electric Power Research Institute, based on Department of Energy Information

TRL (Technology Readiness Levels)	
1	Exploratory research transition basic science into laboratory applications
2	Technology concepts and/or application formulated
3	Proof of concept validation
4	Subsystem or component validation in laboratory environment to simulate service conditions
5	Early system validation demonstrated in laboratory or limited field application
6	Early field demonstration and system refinements completed.
7	Complete system demonstration in an operational environment.
8	Early commercial deployment
9	Wide-scale commercial deployment

The Office of Entrepreneurial Programs, Resnick Sustainability Institute, November 2023