

# CalSEED

**Apply March 1<sup>st</sup> – 11<sup>th</sup> for \$150,000**



# Agenda

1. Overview of CalSEED Program
2. Entrepreneur Journey
3. Eligibility
4. How it works
5. Review process
6. Application timeframe

# CalSEED

- Funded by California ratepayers through the Electric Program Investment Charge (EPIC)
- Made possible by the California Energy Commission (CEC)



**CALIFORNIA**  
**ENERGY COMMISSION**

# Concept Award Solicitation

The California Sustainable Energy Entrepreneur Development Initiative grants up to \$600,000 to early stage clean energy concepts and provides professional development resources



## Concept Award

\$150,000

Concept Development & Assistance

Mentorship from entrepreneurial experts and industry leaders

Introduction to resources to advance the concept



## Prototype Award

\$450,000

Successful Concept Awardees prepare for Commercialization

Business Plan Competition to push awardees to think in a commercialization area

Eligibility Applications open from March 1 - 11, 2019  
Visit [www.calseed.fund](http://www.calseed.fund) to apply!

# Program Partners

Our unique program represents an innovative public-private partnership between the State of California and a diverse group of organizations leading California's energy transformation



# Regional Cluster Partners



SOUTHERN  
CALIFORNIA

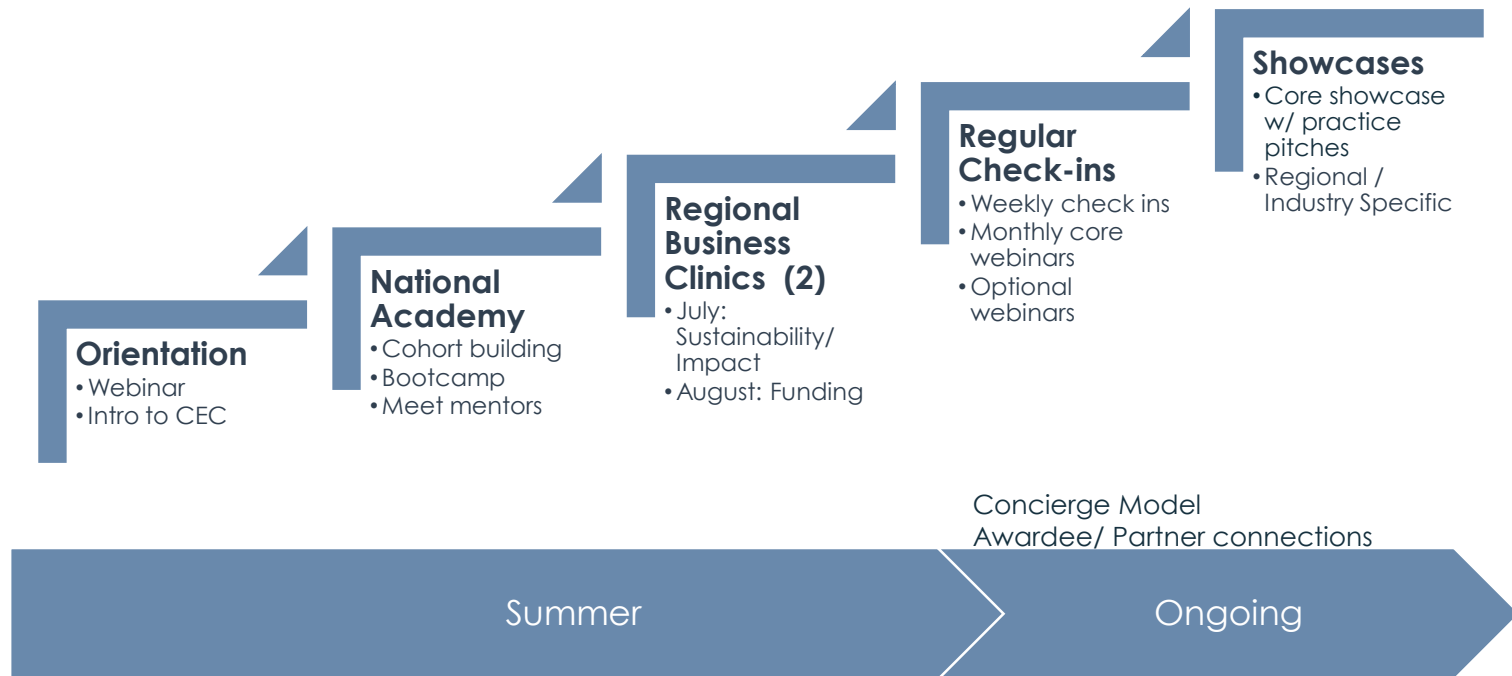
**ENERGY**  
**INNOVATION**  
NETWORK

Imperial | Riverside | San Bernardino | San Diego

# **Entrepreneur Journey**

Professional Development

# Entrepreneur Journey



**Bold = in person**



# Program Benefits

CalSEED Awardees will access benefits to develop a concept and prepare for the Prototype Award Business Plan Competition.

**Grant dollars**

**A powerful network**

**Mentorship**

**Operational and  
technical resources**

**Online training**

**Legal counsel**

**Regional Innovation  
Clusters**

**Cleantech Open  
Accelerator**

**Community**

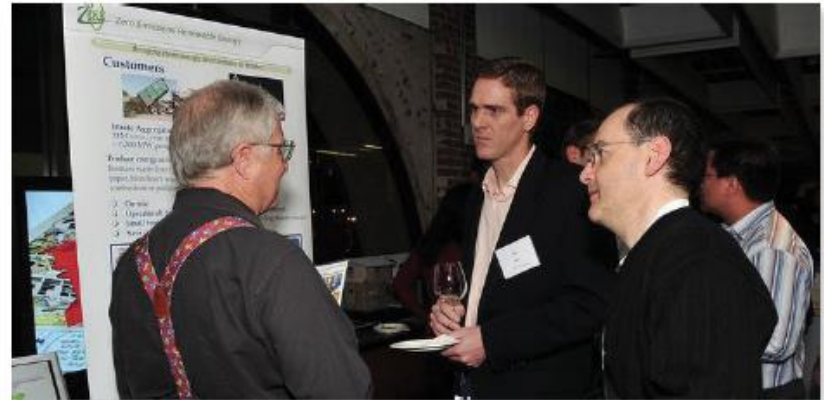
# Cleantech Open Accelerator Program

## TRAINING

National Academies,  
National Webinars and  
Regional Training  
Practice Judging and  
Business Clinics

## MENTORING

Local and international  
mentors (generalists and  
specialists)  
Business Clinics



## ACCESS TO CAPITAL

Relationship with Strategic  
Investors, Angel Groups  
and VC firms  
Pitch Panels, Networking,  
Investor Connect



## SHOWCASING

Regional events  
and showcases  
National Conference  
and Global Forum  
Press exposure

# Eligibility

Who can apply and what kinds of projects are funded

# Who can apply?

- Individuals/Teams
- Businesses
- Nonprofit Organizations
- Independent labs, community groups, and other collectives

# What are the basic requirements?

CalSEED is open to applicants working on early stage innovations—from concept to basic prototype.

- The proposed innovation should benefit California ratepayers
- You must be located in California, provide your California address, and be in good standing with the California Secretary of State
- Be under the \$1 Million private funding cap
- The concept should be pre-demonstration scale (Technology Readiness Level 2-4)
- Be within for one of the specified technology areas
- Must be able to answer “Yes” to at least three impact questions

# What will CalSEED fund?

Applications are being accepted specifically for the following technology areas:

<b>Energy Efficiency</b>	Solid-state lighting, electric heat pumps, non-vapor compression cooling, advanced materials and coatings for windows, building envelope, or water/waste water treatment or industrial electrification
<b>Renewable Generation</b>	Solar PV systems or solid-state energy harvesting using thermoelectrics, thermionics, or piezoelectrics
<b>Energy Storage</b>	Battery storage, flywheels or thermal storage

# Hardware, Software, & Integrated Solutions

	Hardware	Software	Integrated Solutions
Description	Physical components that require design and testing	Programs /applications that advance new science	Innovative combinations of software and hardware
In Scope Examples	<ul style="list-style-type: none"> <li>• Manufacturing equipment</li> <li>• Sensors</li> <li>• Transmission &amp; Distribution infrastructure improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Algorithms for grid reliability/control</li> <li>• Internet of Things applications</li> <li>• Demand response solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Microgrid solutions</li> <li>• Building efficiency optimization</li> <li>• Community access to clean energy</li> </ul>
Out of Scope Examples	<ul style="list-style-type: none"> <li>• Project financing for existing technologies</li> <li>• Manufacturing scale up</li> <li>• Commercial scale prototype</li> </ul>	<ul style="list-style-type: none"> <li>• Customer acquisition</li> <li>• Games</li> <li>• Website development for an existing company</li> <li>• Training/workforce development platforms</li> </ul>	<ul style="list-style-type: none"> <li>• Single non-replicable solutions</li> <li>• Concepts that are not novel in application</li> </ul>

# What is “early stage”?

## Hardware

- Analytic studies / modeling
- Proof of concept
- Basic functionality validated in laboratory

## Software

- Alpha versions
- Preliminary requirements defined
- Basic principles coded

## Integrated Solutions

- Preliminary mapping or combining
- Minimal integration
- Early testing
- Identification of system components



# You are probably too late stage if your technology...

- works smoothly (considered operational/debugged)
- is beyond a pilot scale prototype
- is currently being manufactured
- is certified/commercialized
- is successfully incorporated in a larger system
- software is classified as 'beta'
- has a full scale demonstration
- is revenue-generating or profitable
- has existing customers

# **Additional Requirements**

Social equity and community impact are  
a core component of CalSEED

# What does social equity mean?

Equality



Equity

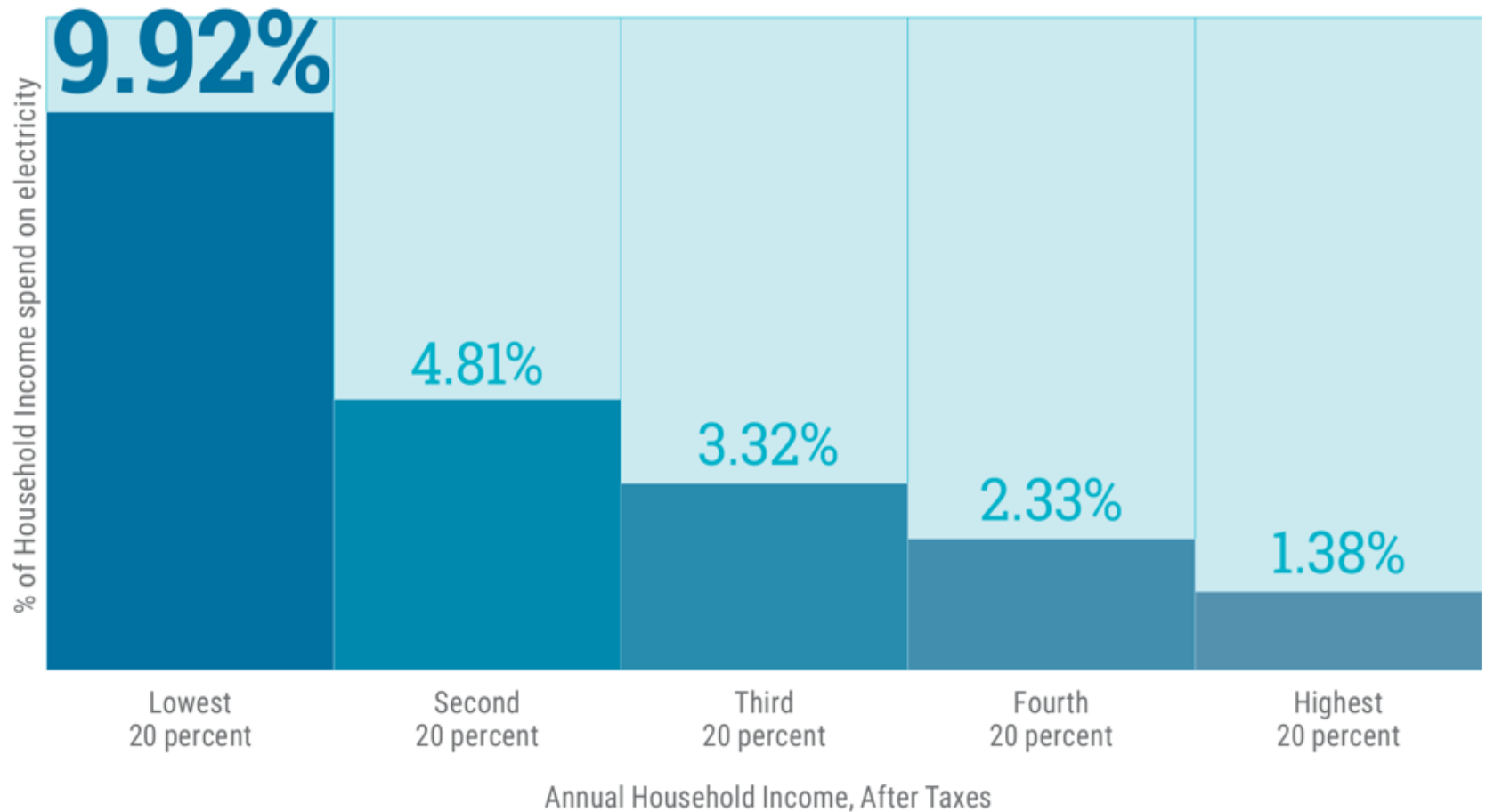


Justice



***Social Equity*** refers to the fair and just distribution of societal benefits and burdens.

# Why is social equity part of CalSEED?



The lowest segment of earners pays considerably more of their income for electricity than higher earners. // Groundswell

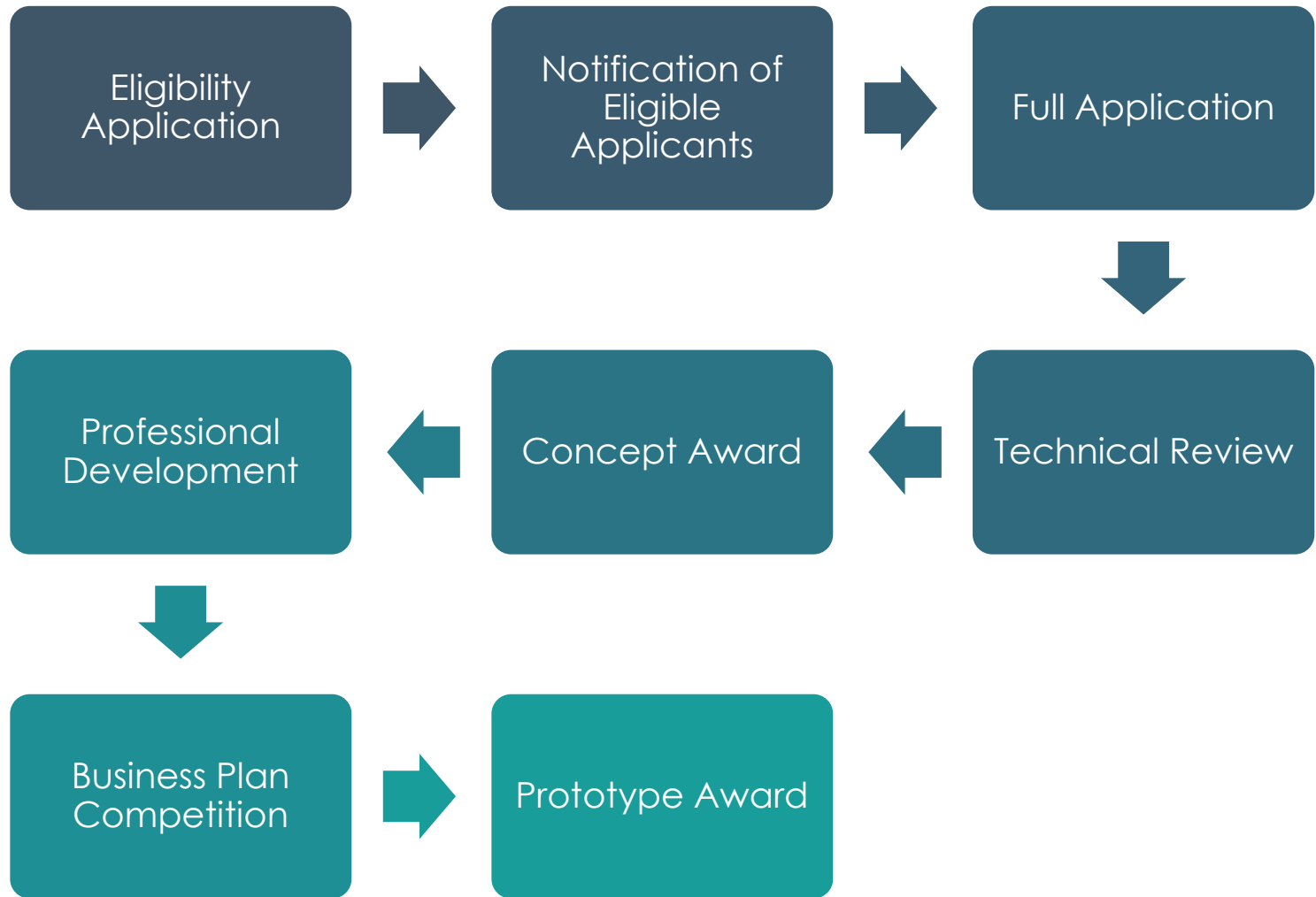
# Impact questions on application

To be selected for a CalSEED award, applicants will need to prove that their innovation could meet at least three of the following impact criteria:

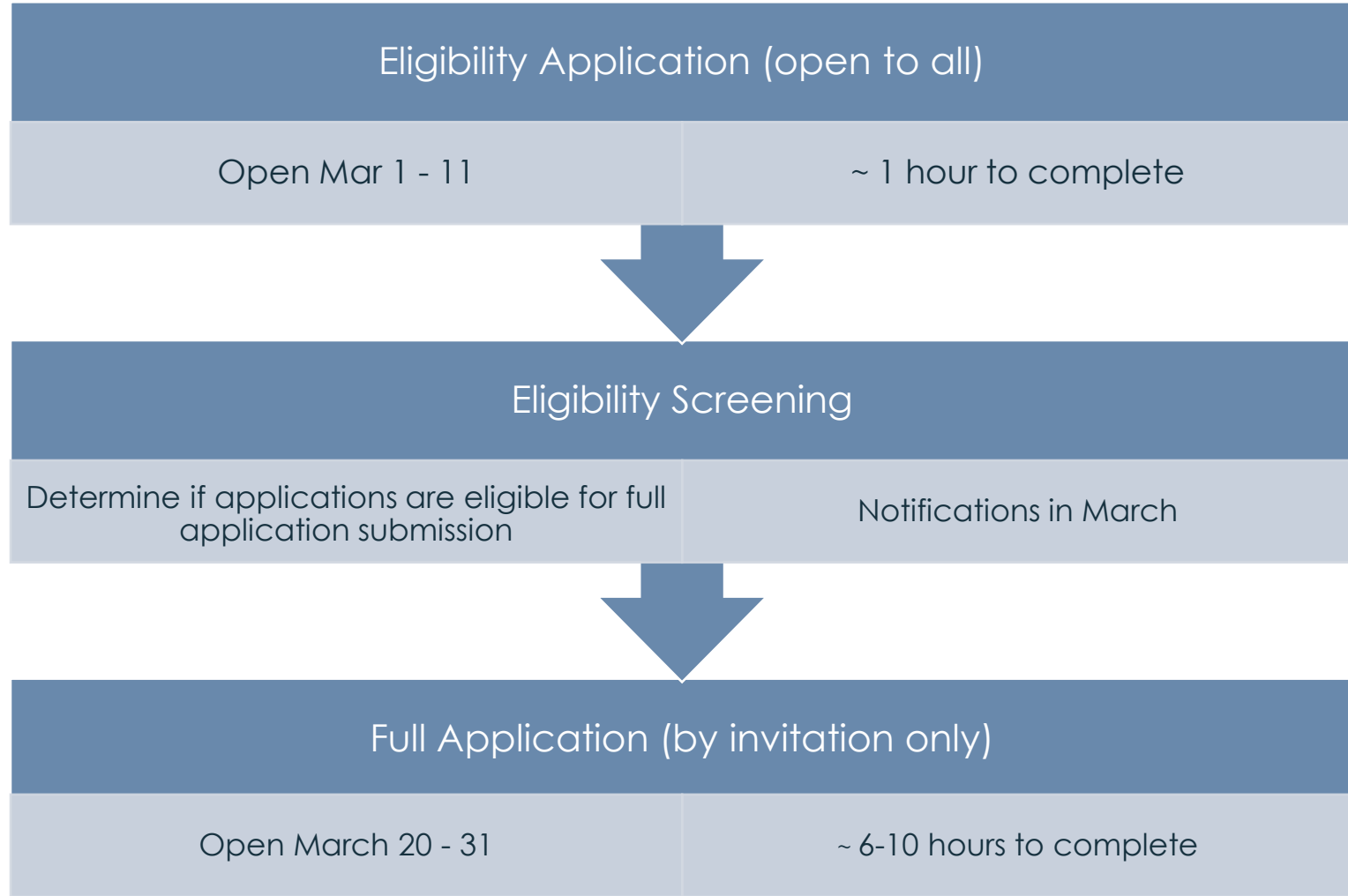
1. Economic opportunities
2. Increasing access
3. Decreasing pollution burden
4. Project siting
5. Community partnerships

# How it works

Application process



# Two Rounds of Applications





# Application Process

Both parts of the application can be completed and submitted entirely online.

As part of the **eligibility application**, applicants will be asked to:

- Answer multiple choice questions about their innovation and stage of development
- Describe their clean energy concept
- Disclose the amount of funding raised to date
- Identify the potential for community impact

# Application Process cont.

As part of the **full application**, applicants will be asked to

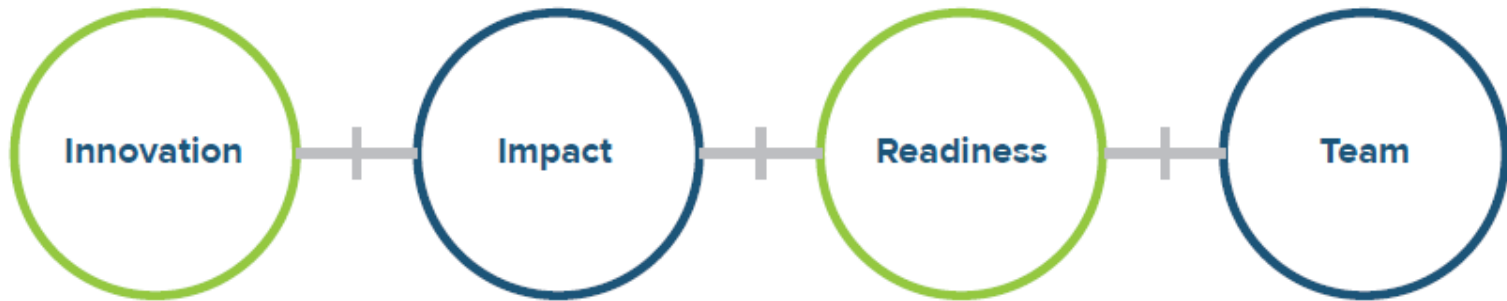
- Provide additional information about their clean energy concept and its potential benefits
- Provide information about their team, entity, or organization (if applicable)
- Attach supporting documentation
- (Optionally) Attach Letters of Support

**Refer to the application manual at [www.calseed.fund](http://www.calseed.fund) for more detail, including all application questions**

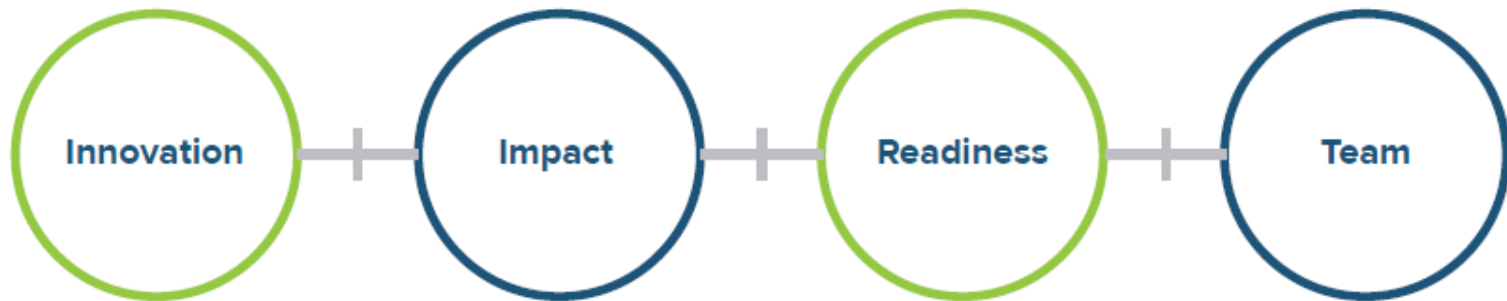
# **Review Process**

Technical Advisory Committee

# Review Process



# Review Process



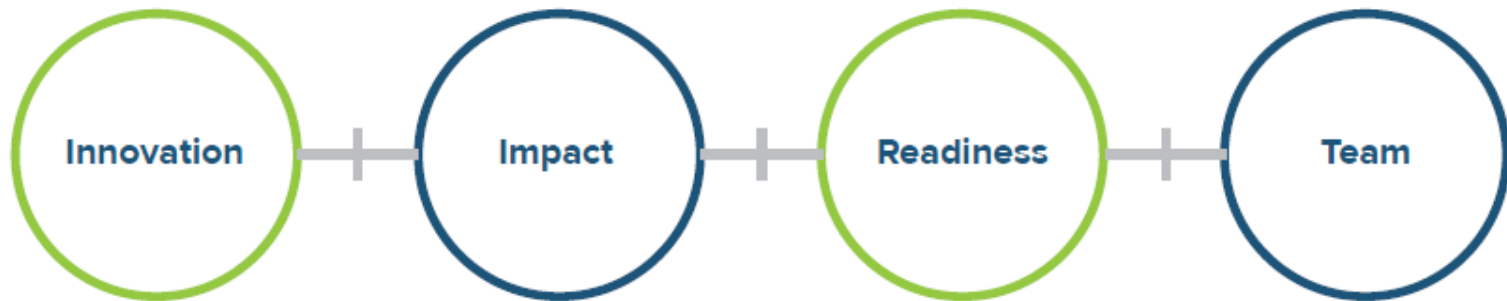
## Innovation

Is the project goal achievable?

Do you understand the key technical and commercial challenges?

How would the project improve upon existing products or solutions?

# Review Process



## Impact

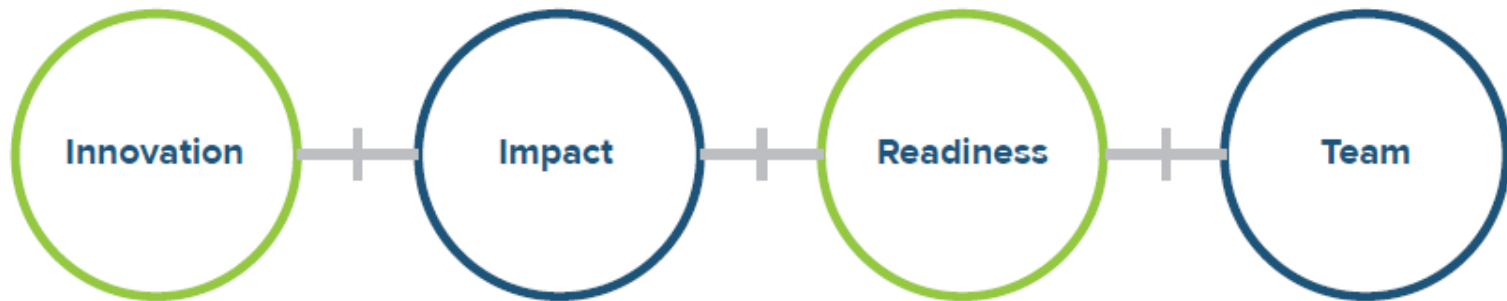
How will the innovation benefit CA ratepayers?

What communities would benefit from your innovation?

How would the project increase access to clean energy within disadvantaged communities?

What economic development opportunities will the innovation create?

# Review Process



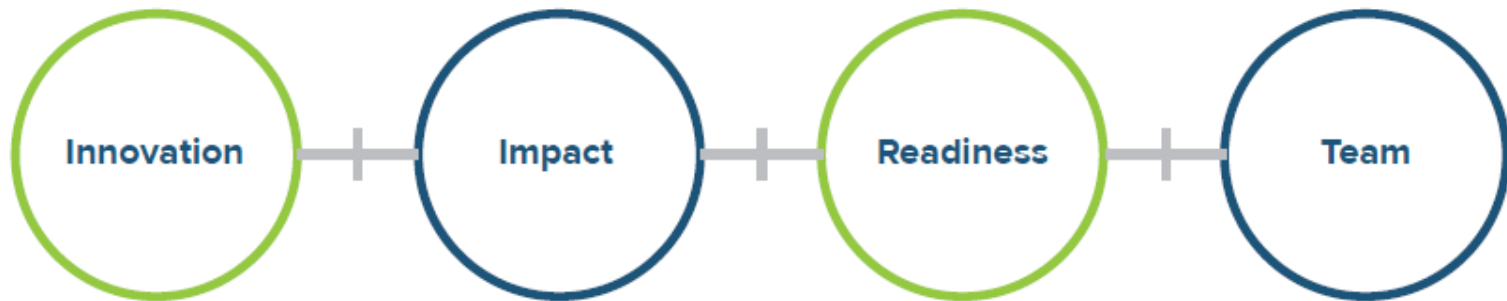
## Readiness

How would the team use the Concept Award funds?

What would be the project milestones and deliverables?

How feasible is the plan?

# Review Process



## Team

Who is on the project team?

Why is the team the right team?

What have the team members done before that would contribute to the success of this project?



# Application Timeframe

- **March 1 – March 11:** Eligibility Applications Open
- **March 12 – March 19:** Eligibility Review & Notification
- **March 20 – 31:** Full Applications Open
- **April 5 - 19:** Technical Advisory Committee Review
- **Summer:** CEC Approval

\* Review and award timing are subject to change based on approval processes

**Q&A**

# Contact Us

[info@calseed.fund](mailto:info@calseed.fund)

# Impact questions on application

## **Economic opportunities**

- Positive economic impact in low-income and/or disadvantaged communities in terms of job creation, micro-and small-business partnerships and economic development

## **Increasing access**

- To clean energy, energy efficiency technologies, energy storage, or energy cost reduction within disadvantaged communities and/or low-income communities

## **Decreasing pollution burden**

- Address pollution burdens that disproportionately impact disadvantaged and/or low-income communities

## **Project siting**

- The innovation could be deployed in a disadvantaged community and/or low-income community (e.g. empowerment zone)

## **Community partnerships**

- Existing or planned partnerships with local community-based organizations or other local officials to help demonstrate stakeholder support for the innovation at the community level