



California Clean Energy Fund



California Clean Energy Fund

---

Presentation to ETAAC

May, 2007



California Clean Energy Fund

# Table of Contents

Overview

Programs

Looking Ahead

CalCEF and AB 32

# The California Clean Energy Fund

CalCEF is a nonprofit corporation formed to accelerate investment in the state's clean energy market. The independent corporation was formed by the State of California out of the PG&E bankruptcy settlement

Mission. Create a series of investment vehicles that serve as catalysts for advancing California's clean energy economy

## Strengths:

- Diverse Board of Directors enables CalCEF to advance an investment agenda that is closely aligned with major policy drivers and technology developments
- Three investment managers together bring over 5 Billion in market power. Managers position CalCEF to build a clean energy investment portfolio that focuses on areas where California has a natural advantage
- Through a number of programs, CalCEF brings together diverse constituencies to inspire collaborations and positive, measurable impacts on critical energy issues

# The CalCEF Board of Directors

**Michael R. Peevey (Chairman)**, President, California Public Utilities Commission

**Ralph Cavanagh**, Senior Attorney & Co-Director of the Energy Program, Natural Resources Defense Council

**Jonathan Foster**, General Counsel & Vice President of Corporate Development, Atempo Inc.

**Tom Jacoby**, CEO, Tymphany, Inc.

**Mark Levine**, Director, Environmental Energy Technologies Division, Lawrence Berkeley National Lab

**Nancy Pfund**, Managing Director, JP Morgan

**Art Rosenfeld, PhD.**, Commissioner, California Energy Commission

**Mason Willrich**, Chairman, Board of Governors, California Independent System Operator

**Cathy Zoi**, CEO, Alliance for Climate Protection

# The Clean Energy Market: Opportunities and Challenges

The **three key components** are in place to meet the energy challenge

- **Policy** is promoting both innovation and investment
- **Technology** is accelerating across disciplines
- **Finance** is rushing for the entrance

**But...Major gaps exist that are unique to this sector, potentially threatening the state's long range goals:**

- Investable capital and productive investment are not the same thing
- Clean energy is not the same as IT, biotech, etc.
- Public-private partnerships are undervalued
- Fund sizes are threatening true early-stage investing - can a \$1 billion fund afford to commit diligence to a \$250,000 investment?
- Can new technologies mature to become scalable infrastructure?

# The Continuum of Technology Development



- New technologies must navigate most, if not all, of these stages
- Each stage presents different policy, technology and financial challenges
- No technologies remain unchanged through this cycle; no entrepreneur has mastered the dynamics of each stage; no financier is comfortable with the risks inherent in each category
- This process is essential to the energy challenge - and may be more difficult than for other technology types

# CalCEF Strategies and Programs

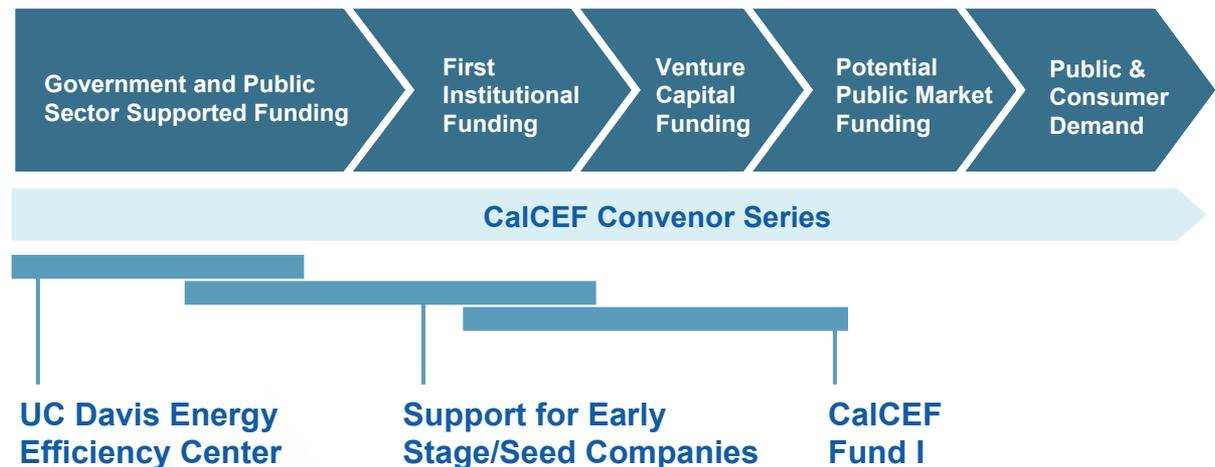
## Work to Close the Gaps

### Strategy Elements

- Catalyze clean energy investment by establishing a new investment model that demonstrates the nexus between environmental and economic benefit
- Support innovation by creating new investment vehicles that enable California to better attract and nurture clean energy start-up companies
- Promote private sector leadership in commercializing clean energy solutions

### Current Programs

- CalCEF Convenor Series
- UC Davis Energy Efficiency Center
- Support for Early Stage/Seed Companies
- CalCEF Fund I



# CalCEF Fund I

CalCEF's work with the Venture Capital community attempts to achieve a number of goals:

- Build an investment portfolio that proves the nexus between environmental and economic benefit
- Accelerate innovations critical to the clean energy challenge
- Align investment patterns with macro policy initiatives like the Global Warming Solutions Act (AB 32) and the Energy Action Plan
- Position California to capture more equity dollars and send positive investment signals to the market
- Reach out to other stakeholders to accelerate CalCEF and California investment goals

### CalCEF Portfolio Companies











































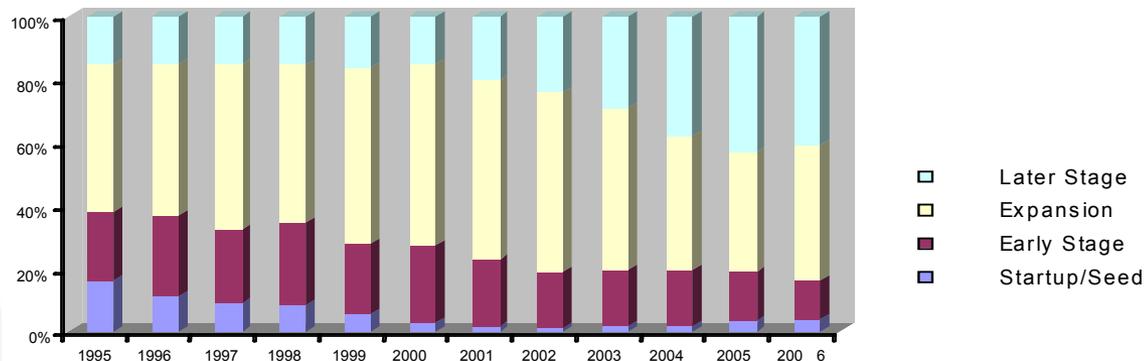


# Supporting Seed Stage Companies

Support for seed stage innovation lags despite a surge in clean energy investing, undermining policy imperatives by leaving important innovations stalled before they can make meaningful contributions to the energy challenge.

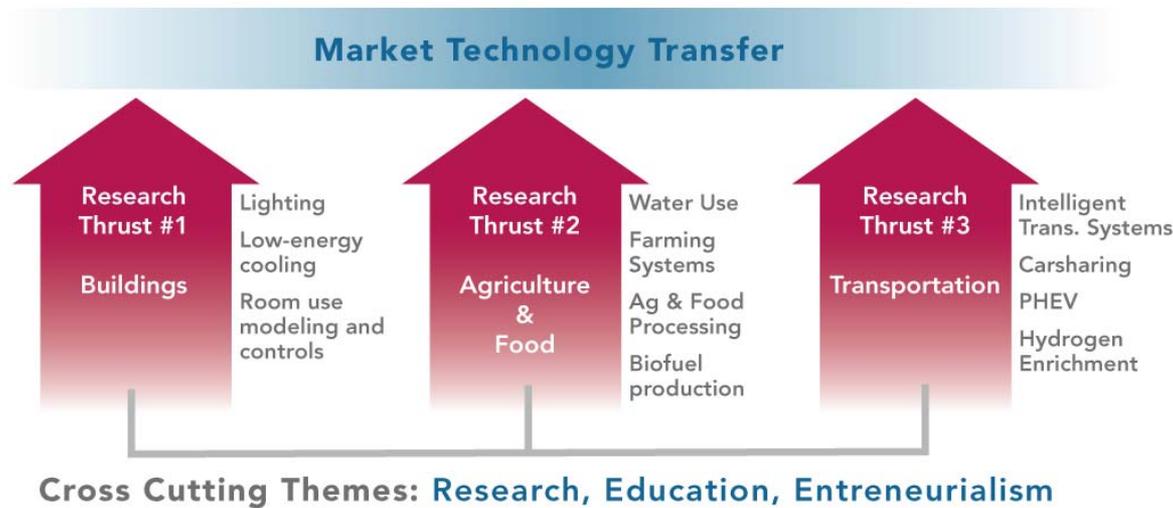
CalCEF is actively exploring a variety of strategies to provide intellectual and financial capital to promising young companies.

- CalCEF has retained Susan Preston, angel investor, author and international expert on angel financing mechanisms, to explore strategy alternatives.
- A key value proposition includes linking California's disparate centers of innovation to provide support for young companies and accelerate commercialization.



# U.C. Davis Energy Efficiency Center

- Create a world-leading university institute focused on energy efficiency
- Promote private sector leadership in advancing commercialization of energy efficiency solutions
- Connect the work of the Center to state policy objectives re: energy efficiency programs, goals and mandates with particular focus on AB 32 implementation
- Support emphasis on early success in technology development/transfer



Key Activities of the Energy Efficiency Center. The principal goal will be the transfer of technology from the three research thrusts.

# CalCEF Convenor Series

- Sponsor series of convening sessions to include among others: Energy Efficiency and AB 32, Role of Public RD & D, Utilities as Alternative Fuel Providers
- Author papers which contribute to the clean energy dialogue
- Establish CalCEF as a thought leader around critical energy issues
- Leverage CalCEF's value as a nexus between policy, technology and investment patterns
- Provide support to California's various centers for clean energy innovation



**The CalCEF Convening Series – Clean Transportation Technology for California**

Transportation technology issues are particularly prominent at this time, with significant venture activity registering in both the popular and the trade press, new companies and innovations seeking funding, and state policy engaging the challenge on a number of fronts.

CalCEF will host a convening series on clean transportation, and in collaboration with industry and academia, seeking technology solutions to the challenges that will overcome in order to bring these solutions to market.

This effort is particularly timely given the climate change objectives and the need for subsequent efforts will be a focus of state policy in pursuit of these objectives.

**Date, Time and Location:** September 10-11, 2007, San Francisco, CA

**Objective:** To identify three critical areas of California's ability to execute a clean transportation strategy.

**CONFERENCE PURPOSE**  
The CalCEF Annual Conference is the forum for assessing California's progress in turning policy initiatives into technology and market innovations. Sessions and speakers will address the specific ways in which the network of clean energy actors (such as companies funded and jobs created), policy and technology category. With the Global Policy efforts will be explored in light of their "reality check" – from the perspective of the private sector.

**CONFERENCE DATE:** June 18th 2007  
**8:30am to 5:30pm Reception: 6:00pm**

The California Clean Energy Fund Invites You to a one-day, invitation only event in San Francisco exploring California's progress and challenges in the transition to clean energy.

This is the "reality check" – from the perspective of the private actors expected to deliver, how is California's policy environment shaping up? What are the prospects for near-term measurable success? Please join other senior figures in policy, technology and finance for a frank exploration of these crucial issues.

**REGISTER**

Contact Person: Biddy Nade  
925-278-2894 or [en@cal@pacenetics.com](mailto:en@cal@pacenetics.com)

[Learn more about CalCEF](#)

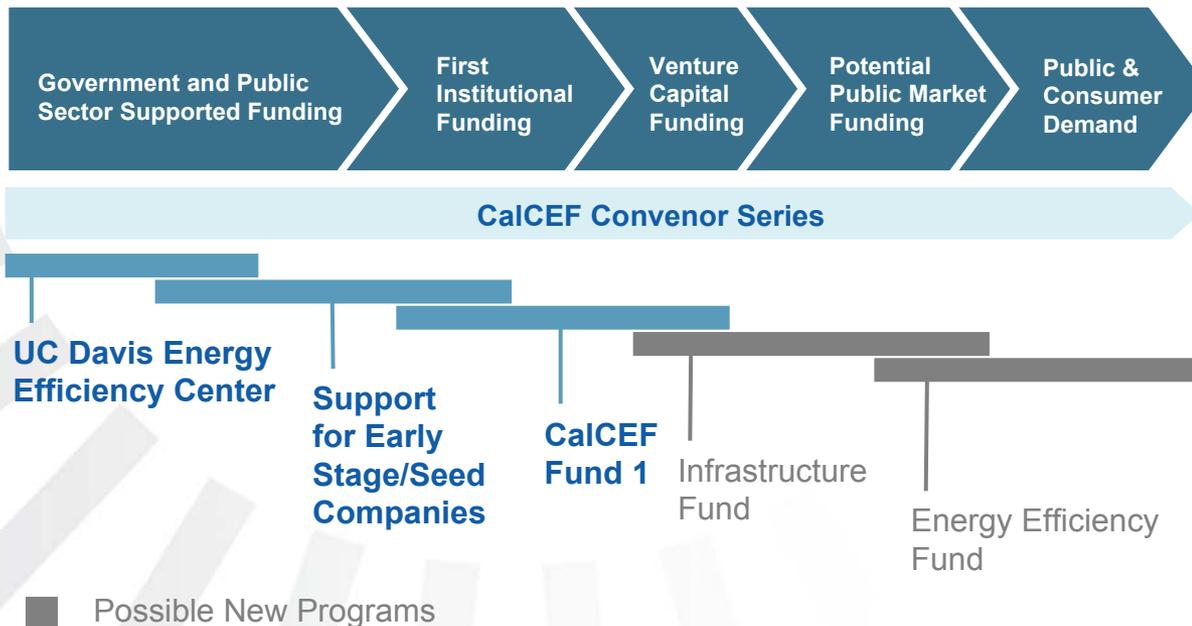
**CONFERENCE LOCATION:**  
PG&E Pacific Gas and Electric Company  
PG&E Theater  
77 Beale Street  
San Francisco, CA

**RECEPTION LOCATION:**  
ONE MARKET  
1 Market Street  
San Francisco, CA



# Looking Ahead

- The clean energy sector is young
- Gaps will continue to emerge that will take more than money to fix
- An investment strategy informed by policy trends and technology advancements is well positioned to succeed



*"Venture capital is a cyclical industry, and we are in one of those cycles right now where a minority of smart investors will be the ones generating good returns, and the others will end up licking their wounds."*

*Venture Capitalists Warned Against Over-Exuberance*  
 London, 14 May 2007,  
 New Energy Finance



# CalCEF and AB 32 Implementation

## CalCEF Is Engaged in Meeting AB 32 Goals and Objectives Through:

- Supporting energy efficiency as California's best GHG reduction practice via the UC Davis Energy Efficiency Center and other means
- Creating an investment portfolio that supports young companies that reduce GHG
- Helping to close the very early stage funding gap to ensure that tomorrow's "Game Changer" technologies receive support today
- Providing an informal connection among and between California's many but disparate centers of innovation to help ensure scale and focus of effort
- Creating an opportunity for clean energy stakeholders to discuss progress and challenges in California's transition to a clean energy economy



California Clean Energy Fund



California Clean Energy Fund

---

**Contact:**

5 Third Street  
Suite 1125  
San Francisco, CA  
94103

Tel: 415.986.4590

[www.calcef.org](http://www.calcef.org)