Welcome and Introduction

Laurie ten Hope
Deputy Director, California Energy Commission
Opening Remarks

Dr. Robert B. Weisenmiller
Chair, California Energy Commission
Opening Remarks

Robert Weisenmiller, Chair, California Energy Commission
Through 2018, the Energy Commission funded 304 EPIC project awards, encumbering $651.5 million.

More than 30 percent of Energy Commission EPIC demonstration projects are in disadvantaged communities.
CEC, CNRA, OPR and Regional Volunteers Advance Science for Climate Adaptation

Westerling (2018)
Building a Safe and Resilient Energy System

The successful performance of the Blue Lake Rancheria microgrid in an actual emergency provides further evidence that microgrid technology can play a key role in building a more resilient electricity system.

Photo: Blue Lake Rancheria
Improving the Affordability, Health and Comfort of California’s Communities

Customer Centric Retrofits in Ontario

Customer Centric Retrofits in Fresno

ZNE Multifamily Evaluation- Cloverdale and Calistoga

Smart Ceiling Fans with Communicating T-Stats

Affordable ZNE Approaches with Habitat for Humanity
Enabling a More Decarbonized and Decentralized Electric Grid

Results from an EPIC-funded field demonstration have helped Sunfolding make the first sales of the AirDrive™ technology for agricultural sites in Madera and Fresno Counties for lighting, water pumps, irrigation, and other high-energy-use systems.
Advancing Low-Carbon Transportation Technologies

During this pilot demonstration, the drivers realized a 45 percent reduction in their charging cost when using the managed charging schedule, which resulted in an average $467 annual savings.

Photo: ChargePoint, Inc.
Supporting California’s Local Economies and Businesses

To date, start-up companies in the CalSEED program have attracted $45.1 million in private investment, and $9 million in public funding.

Photo: CalSEED
Looking Ahead: Growing Tech Transfer from Lab to Market

Three Pillars of Energy Innovation

The supply of potentialities  
Conversion of potential to solutions  
The demand for solutions

“For companies to be willing adopters of a clean energy technology, the technology needs to solve a problem big enough to make the effort and cost of adoption worthwhile.”

Source: Moniz and Yergin, February 2019, Advancing the Landscape of Clean Energy Innovation, Breakthrough Energy
Morning Keynote Address

Senator Henry Stern
27th Senate District
Thought Leaders Fireside Chat

Moderator: Dr. Danielle Applestone

Presenters: Dr. David Danielson, Dr. James Zahler
Now Beginning Morning Breakout Sessions

Please refer to https://www.energy.ca.gov/calendar/index.php?eID=3183 for WebEx information
Electrifying Buildings

Moderator: Panama Bartholomy

Presenters: Theresa Pistochni, Dr. Paul Raftery, Bryan Dove, Cathy Higgins, Ryohei Hinohuma
“Mutual Housing California develops, operates and advocates for sustainable housing that builds strong communities through resident participation and leadership development.”
Mutual Housing at Spring Lake
Mutual Housing at Spring Lake

Electric Stove, High Efficiency Lighting, Ceiling Fans

R-21 Insulation

Daikin Altherma Heat Pump Water Heater & HVAC

Nexi Energy Monitors
Mutual Housing at Spring Lake
Zero Net Energy Performance

2018 Annual Net Energy Consumption
CEC EPIC Symposium

February 19, 2019
Cathy Higgins, Research Director, NBI

4 Points in 5 minutes:
Data and Trends for Electrification
But building electrification is a critical step to support GHG reduction goals

- ~50% of the electricity generation in CA is from Natural Gas
- Gas will be a part of the fuel mix for decades
- Increasing attention to embodied carbon in materials
- All electric buildings help the grid to utilize excess renewable generation
- Today we are addressing electric technologies @ the building
10% of CA GHG emissions are from direct use of Fossil Fuels in buildings.
2) Gas use varies widely – know the data

Average total energy use that is Natural Gas:
- 48% across all CA buildings | 30% in commercial | 70% in res.

*Red Columns: Top 5 building types by total use of CA Commercial Sector gas - together these are 54% of the Commercial Sector use of gas

Source: 2006 CEUS-Itron Data

Also varies by location/climate
3) Zero Energy buildings demonstrate all-electric

15 CA all-electric ZNE Commercial Buildings¹

<table>
<thead>
<tr>
<th>Building Name</th>
<th>CA City</th>
<th>Size (sf)</th>
<th>Building Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>435 Indio Ave</td>
<td>Sunnyvale</td>
<td>31,800</td>
<td>Office</td>
</tr>
<tr>
<td>AP+I Design</td>
<td>Mountain View</td>
<td>14,300</td>
<td>Office</td>
</tr>
<tr>
<td>Audubon Center at Debs Park (off grid)</td>
<td>Los Angeles</td>
<td>5,020</td>
<td>Other</td>
</tr>
<tr>
<td>Bagatelos Architectural Glass Solutions</td>
<td>Sacramento</td>
<td>63,000</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Bishop O’Dowd High School, Environmental Science Center</td>
<td>Oakland</td>
<td>3,275</td>
<td>K-12 School; Secondary School</td>
</tr>
<tr>
<td>David and Lucile Packard Foundation</td>
<td>Los Altos</td>
<td>49,161</td>
<td>Office</td>
</tr>
<tr>
<td>Diamond X Ranch Student Intern Center-Malibu</td>
<td>Calabasas</td>
<td>3,500</td>
<td>Visitor Center</td>
</tr>
<tr>
<td>DPR San Francisco Office</td>
<td>San Francisco</td>
<td>24,010</td>
<td>Office</td>
</tr>
<tr>
<td>Environmental Nature Center</td>
<td>Newport Beach</td>
<td>8,535</td>
<td>General Education</td>
</tr>
<tr>
<td>Environmental Tech. Center Sonoma State</td>
<td>Rohnert Park</td>
<td>2,200</td>
<td>Higher Education</td>
</tr>
<tr>
<td>IBEW Local 595 Zero Net Energy Center</td>
<td>San Leandro</td>
<td>45,001</td>
<td>General Education</td>
</tr>
<tr>
<td>IDeAs Z2 Design Facility</td>
<td>San Jose</td>
<td>6,557</td>
<td>Office</td>
</tr>
<tr>
<td>Plaza Point</td>
<td>Arcata</td>
<td>20,283</td>
<td>Multifamily</td>
</tr>
<tr>
<td>Sacred Heart Schools Stevens Family Library</td>
<td>Atherton</td>
<td>6,800</td>
<td>K-12 School; Primary School</td>
</tr>
<tr>
<td>West Berkeley Public Library</td>
<td>Berkeley</td>
<td>9,399</td>
<td>Library</td>
</tr>
</tbody>
</table>

¹Source: NBI Getting to Zero Database

- 50 all-electric ZE commercial buildings¹
  - Schools – 46%
  - Offices – 28%
  - Public Assembly – 12%
- Site end use areas that are 75-96% gas in CA res./comm. buildings:²
  - Space heating
  - Water heating
  - Cooking

²Source: M. Brook, CEC Decarbonization pres. 6/2019
4) Zero Carbon policies and metrics are trending

- **Policy barriers**
  - EE programs are kWhs not CO₂
- **Zero carbon code proposals**
  - a) Phase-out of building-level combustion, b) Move to GHG metric from energy cost/site/source metrics
- **Fuel switching incentives**
  - Frist state - Mass. 2019
- **Electric “Readiness” Requirement**
  - IECC 2021 Proposal

Thank you
Daikin Electrification Solutions

Ryohei Hinokuma

EPIC Symposium | Accelerating Clean Energy Innovation
Electrifying Buildings
@ California Energy Commission
• February 19th, 2019
Customized Market Technology
- Smart Thermostat
- Air filtration
- Smart sensing

Daikin's Global Core Technology
- Inverter
- Zoning
- Heat Pump
- Refrigerant Control
- Air flow control

Air Intelligence
"Visualizing Air"

Detect
Visualize
Act
Daikin Working with BlocPower for Con Edison Natural Gas Demand Reduction

Proposal Overview

- **Project Origination**
  - **BP Target**
    - BlocPower database contains 20,000+ multifamily buildings with publicly available data
    - BlocPower will target 6,225 of the 20,000+ multifamily buildings that have 2-10 units and burn #2, #4, or #6 fuel oil
  - **BlocMaps**
    - BlocPower customer engagement tool deployed during NYC Mayor’s Office of Sustainability program Community Retrofit NYC
    - Entry point for building owners and tenants to provide data to improve preliminary project design and project economics estimation

- **Pre-Design**
  - **BP Project Dashboard**
    - BlocPower’s engineering team will use in-house engineering software to develop a preliminary model to support a retrofit scenario
    - Criteria for selecting measures will be contingent on building size, existing building systems conditions, applicability to the specific building, and impact to natural gas peak demand reduction
    - The package of measures will encompass a brief description of the proposed measures, project economics such as estimated construction cost and utility cost savings, as well as reduced peak natural gas
  - **Collaboration with Daikin Applied New York**
    - BlocPower will present the package of measures to the building owner and introduce team members from DANY to start the bidding process and the contractors’ selection for the preliminary scope of work

- **Contractor Bidding**
  - **RFP with Daikin Preferred Contractor Network**

- **Construction**

- **Measurement & Verification**
  - **Daikin equipment commissioning**
  - Owner signs off on equipment installation and Energy Services Agreement
The Energy Transition Tax Credit (CITE) as well as tax reduction measure toward HPs cut down purchasing prices down to less a half. The market largely expanded.

Yet the following year was met with the financial crisis as well as reduced CITE credit, and the market started shrinking.

Starting in 2013, the French building code, RT2012, was enacted. New homes needed to consume less than 50kWh/m² primary energy, and this helped the market to start growing back.
About the Center for the Built Environment (CBE)

- Industry/University Collaborative Research Center
- Established in 1997 with NSF support
- Sponsored by diverse group of ~50 industry partners

Photo from a semi-annual meeting for sharing results and getting feedback
EPIC project - Integrating ceiling fans and thermostats for efficient comfort

**Goal**: Demonstrate energy savings and improved comfort

**Overview**
- **Scope**: Lab & field studies, codes and standards & design tool development.
- **Timeline**: 2016 - 2020
- **Funding**: $2.2M from EPIC, CBE, and BAF
Smart ceiling fans

Automated speed using onboard sensors:
- Occupancy
- Temperature
- Humidity

Highly efficient DC motor

Almost totally silent
Thermostat integration over Wifi
Control via remote or phone app

2 – 14 Watts

>2000 Watts
Conventional AC operation

Ambient temperature

Cooling setpoint: 74 °F
Integrated AC and fan operation

- Ambient temperature
- Cooling setpoint: 74 °F
- Cooling setpoint: 80 °F
Field study interventions

- Installed ~100 fans in existing multi-family residential buildings in the Central Valley
- Offices, common rooms, dwellings
- Measure energy use
- Survey occupants
Results from one site in Stockton, CA

Before fan install
Indoor temperature ~72 °F
(n = 29 people)

After fan install

After fan install and AC failed!
Indoor temperature ~ 80 °F
(n = 28 people)

- Cooling setpoint increased (from ~70°F to 76 °F)
- 62% measured AC savings ($1K/month)
Synergies with decarbonization and electrification

- Significant energy savings
- Easily incorporated in new construction or retrofit
- Reduces first cost of AC equipment
- Can shrink and shift peak electrical cooling demand

Energy efficiency isn’t just low-hanging fruit; it’s fruit lying on the ground.

Steven Chu
Nobel Laureate (Physics)
US Secretary of Energy
2009
Thank you for listening

Photos of fans in new commercial buildings (Clockwise from top left)

Commonwealth Club
LMS Architects

Rocky Mountain Institute
ZGA Architects
PGA Engineering
Photo: S Griffen

Bullitt Center
Miller Hull
PAE Engineers

LPA San Jose Office
Photo: C Costea courtesy LPA, Inc
Western Cooling Efficiency Center Research Update

Theresa Pistochini
Engineering Manager
February 19, 2019
Next Generation Heat Pump Testing

UC Davis Project for Electric Power Research Institute
Sponsored by California Energy Commission

Three-phase project
- Variable-speed, single-zone lab testing
- Variable-speed, multi-zone lab testing
- Field testing (in process)

UC Davis Objectives
- Lab Testing of variable capacity equipment
  - Impact of R-6 duct system in unconditioned space
  - Impact of zoning controls
- Develop/test model of equipment and ducts

System COP versus duct-zone temperature for different operating modes. Setting refers to capacity/airflow percentages

Delivery Effectiveness

Capacity and AirFlow percentages
Low-Cost Shallow Bore Ground-Source Heat Pump

UC Davis (Prime), Frontier Energy, Whitebox
Sponsored by California Energy Commission

Overall Objective
- Develop tools to facilitate market acceptance of low-cost ground heat exchangers
  - HE design guidelines
  - Installation best practices
  - Modeling tools
- Facilitate market acceptance of GHEs
- Provide T24 compliance tools

Status
- Detailed models developed
- Lab testing this summer
Residential Retrofits

UC Davis (Prime), Electric Power Research Institute
Sponsored by California Energy Commission

Overall Objective

» Develop retrofit packages for existing homes
  - Cooling system replaced with SWEC
  - Aerosol envelope sealing
  - Whole house ventilation

» Measure performance
  - Energy use
  - Indoor air quality

Status

» Baseline data collected
» Aerosol envelope sealing completed in Fall 2018
» Ventilation system and SWEC install in Spring 2019
Lunch Break 11:45am – 12:15pm

Please Return at 12:15pm for Afternoon Session
Afternoon Keynote Address

Assembly Member Eloise Gómez Reyes
47th Assembly District
CalSEED Entrepreneur Pitch Session

Moderators: Ian Rogoff, Debarshi Das
Presenters: Matt Miller, Dr. Peter Frischmann, Dr. Cheng Jin, Kim Goodrich
“What is the single most effective way to reduce greenhouse-gas emissions? Make air conditioners radically better.”

-The Economist, August 2018

Air Conditioner
5%
System Efficiency\(^1\)

\(^1\) Based off of theoretical ultimate Carnot efficiency at standard temperatures.
Current Problem

Current Architecture
- Fan
- Heat Exchanger

Performance Killers
- Fouling
- Boundary Layer
- Condensate

Result
- Low Efficiency
- Heavy & Loud
- Power-Hungry
- Unattractive
ROTARY Air-Conditioner

FAN + HEAT EXCHANGER IN ONE

Boundary Layer Removed
Via Centrifugal Force

Hub-Mounted Rotary Compressor
NATIVUS ROOM AIR CONDITIONER

Focus on the Needs of the Customer

- **~67% Lower Operating Expense***
- **Light ~12 lbs Single-Person Install**
- **Quiet Variable-Speed Device**

* Energy Savings based on a comparable capacity leading room air-conditioning system. ** Initial estimates based on materials and components selected for manufacturing.
The Future of EV Charging:
Smart, Efficient, Universal & Scalable
Our Team

Steven Low, Ph.D
Chairman
Caltech Professor
Co-founder of FastSoft (acq. Akamai)
BS, Cornell, PhD, UC, Berkeley

George Lee
Chief Executive Officer
Founding Team, FastSoft (acq. Akamai)
Engineer, Akamai
BS, MIT, MS, Caltech

Cheng Jin, Ph.D.
VP Engineering
Co-founder of FastSoft (acq. Akamai)
10+ years leading engineering teams
BS, Case Western PhD, UM-Ann Arbor

Ted Lee
Lead Design Engineer
10+ years of algorithm/software dev
BS, Johns Hopkins, MS, USC

Michael Montagano
Chief Operating Officer (advising)
15+ years tech industry experience
COO/CFO, Mopro (pre-revenue to Series D)
M&A Corporate Finance Attorney
MBA, UChicago (Booth), JD, Indiana
Our History & Vision

2012 - research

2017 - commercialization

EV Charging

Joint DER opt + Energy Services

Energy mgt research funding >$10M

Incubation to launch

Growth

PowerFlex Confidential & Proprietary
The Challenge

California’s ZEV plan
- 1.5M by 2025, 5M by 2030
- By July 2018: 400K+ ZEVs sold in CA

Workplace charging is key
- EVs are parked at work or at home
- Workplaces can install a lot more solar than homes
- Workplace (daytime charging) charging helps tame the Duck Curve

Workplace charging is currently too expensive
- High capital cost: to accommodate large-scale EV charging
- High operating cost: due to demand charges
The Solution

Root cause of workplace charging problem
- Standalone stations with unmanaged charging

PowerFlex adaptive charging service
- Networked charging stations
- Joint optimization of all stations onsite
- … using real-time information and user input

Enable large-scale EV charging at minimum costs
- Saves capital cost: minimize infrastructure capacity
- Saves operating cost: minimize demand charges
Case Study

PF minimizes peak power, reducing capital & operating costs

<table>
<thead>
<tr>
<th>Place</th>
<th>Daily peak power</th>
<th>Unmanaged charging (kW)</th>
<th>PF (kW)</th>
<th>Power savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltech</td>
<td>85.3</td>
<td>33.8</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>Mountain View</td>
<td>46.2</td>
<td>28.4</td>
<td></td>
<td>39%</td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>94.0</td>
<td>56.2</td>
<td></td>
<td>40%</td>
</tr>
</tbody>
</table>
CalSEED Phase I Summary

What we promised in CalSEED I application

At the end of the [CalSEED I] project, we expect:

a) to have implemented a prototype of real-time adaptive charging software system;
b) to have integrated the software with our current level-2 chargers and controllers deployed at Caltech;
c) to have tested, debugged, and evaluated the performance of our adaptive charging software;
d) to have refined our algorithms and software based on our experiments.

What we have accomplished

- A capable smart charging product that uses real-time information to adaptively optimize Level-2 EV charging, validated and deployed at Caltech, JPL, NREL, and high schools in Bay Area.
Our Value Proposition

**Plug for Every Spot: Corporate HR Efficiency**
- Eliminate productivity losses from changing parking locations due to EV parking time limits

**Provide target charging capacity at 30%-60% lower costs**
- Infrastructure costs
- Operating costs (demand charges as well as total kWh from grid)

**Flexibility in implementing operator objectives**
- Code compliance & infrastructure protection
- Minimum demand charge or electricity bill
- Minimum charging time, priority charging
- Jointly optimize other resources (PV, battery)
1. Highly Used:
   - ~3M miles delivered

2. Highly Effective:
   - $3M+ saved in utility costs
SLAC [24 total]
Mountain View Los Altos UHSD [52 total: 52 deployed]
Ralston Apartments [72 total: 30 deployed, 42 under construction]
JPL / NASA [120 total: 52 deployed, 68 under construction]
Campbell Union HSD [248 total: 38 deployed, 210 under construction]
Future: Joint Optimization of DERs

PF will develop technologies for joint optimization of DERs
- EV charging + battery, based on real-time solar generation, building load

Build on PF platform developed during CalSEED Phase 1
- Current platform: adaptive EV charging

Future work
- Large-scale inexpensive EV charging with demand charge mitigation
- Fill the Duck Belly
Problem: Duck Curve

EV charging:
either a problem or a solution

- Raise the Head
- Expand the Belly
Solution: Duck Curve

EV charging: either a problem or a solution

- Flatten the head
- Fill the Belly
Value to Ratepayers and CEC

- **Promote EV (infrastructure) growth** by minimizing CapEx and OpEx costs
- **Improve grid stability** by taming the Duck Curve
- **Expand access** to clean electricity for ratepayers
THANK YOU
Making buildings more efficient at the time of construction

EPIC / CalSEED – Feb 2019
Dan Suyeyasu
problem

4,000 pages and there’s no TurboTax = 15-20% energy loss on new & existing buildings due to non-compliance
smart energy code compliance

design
advanced energy code guidance
online tool used by design teams

construction
data-driven inspections
iPad app used by building departments

~15% energy savings
solution for cities

6 cities use CodeCycle today

stockton, modesto, davis, fairfield, vacaville, concord

CalSEED

POWERED BY California Clean Energy Fund

BAYREN

Local Governments Empowering Our Communities
impact

300+ buildings
>$2 million
in projected utility bill savings
for California ratepayers

5+ buildings in Stockton
CodeCycle is already
improving energy outcomes
in California communities

stockton Buildings in 2018
Advanced Battery Membranes

Peter Frischmann, CEO & Co-Founder
pete@sepiontechnologies.com, (208)-406-9888
Emeryville, CA
Problem: Poor Battery Performance

- Li-ion batteries are reaching a performance plateau
- Energy-dense & safe battery technologies are needed
- Most solutions require expensive retooling of existing manufacturing
Solution: Our Ion-Selective Polymer Membranes

- Improved safety
- Improved energy density
- Improved cost

Li-ion Cell

Advanced Separator/Membrane

- Anode
- Cathode

Improved
- Safety
- Energy density
- Cost
Membranes

they let through things you want
and keep out the things you don't
DURABLY WATERPROOF
Lithium ion Battery Membranes

11 billion ft$^2$
$1.5 billion membrane market
30% Energy Density Boost

- Safe
- 300+ mile EV range
- Lower EV $$$

Li Metal

Sepion Membrane Separator
(in use today)
Gigafactory
Compatible
Business Model

Build Robust IP Portfolio
- 3 Patents/PCT
- 4 patents planned in 2019

Scalable, Capital-Light Manufacturing
- Outsource manufacturing
- Can quickly scale with contract manufacturers
- Drop-in with R2R coating manufacturing systems

Sell or License Membranes to OEMs
- Membranes are easily integrated into devices
- 1\textsuperscript{st} market: Existing liquid lithium ion batteries
- 2\textsuperscript{nd} markets: lithium metal batteries, water treatment
Traction and Go-to-Market Strategy

Currently raising capital for a pilot coating line in CA
# Sepion’s Platform Product Roadmap

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>2018</th>
<th>2020</th>
<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>MARKET SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li-ion Battery Coated Separator</td>
<td>Safety with longer life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.5 Billion</td>
</tr>
<tr>
<td>Li-metal Anode Membrane</td>
<td></td>
<td></td>
<td>30% more energy density</td>
<td></td>
<td></td>
<td>$19 Billion</td>
</tr>
<tr>
<td>Grid-Storage Battery Membrane</td>
<td>Efficiency and cost benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1 Billion</td>
</tr>
<tr>
<td>Water Treatment Membrane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5 Billion</td>
</tr>
</tbody>
</table>

Monetize through direct engagement, licensing, or partnership opportunities
CA – America's Future Li Battery Supplier?

- Biggest US market for EV and Grid batteries
- Global leader in progressive electrification policy
- Rising support for hardtech energy-focused startups not aligned with traditional VC funding models
Imagine If...

...EVs drove 350 mi on one charge

...Smart phones lasted 30 hours on one charge

...e-bikes and scooters had 30% more range on one charge

We will make this possible
We’re selling advanced membranes
We're capital light
We’re targeting high growth markets

Peter Frischmann, CEO & Co-Founder
pete@sepiontechnologies.com, (208)-406-9888
Connecting New Technology Solutions to California’s Underserved Communities

Moderator: Erik Stokes

Presenters: Kathryn Collins, Thomas Jensen, Laura Vogel
CALIFORNIA ENERGY INNOVATION EXCHANGE

CONNECTING NEW TECHNOLOGY SOLUTIONS TO CALIFORNIA'S UNDERSERVED COMMUNITIES

FEBRUARY 19, 2019
Agenda

PART 1  Introduction to the Platform
PART 2  Platform Demonstration
PART 3  Joining and Getting Involved
A place for community-based organizations, local governments, researchers, startups, investors, and others to make connections, find cleantech project and funding opportunities, share news, and highlight resources that strengthen the innovation ecosystem.

- Founded in California
- An initiative of the California Energy Commission
- Open to the public and actively managed/curated
- Hosted on a powerful innovation platform tool

<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>PROJECTS</th>
<th>RESOURCES &amp; TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A trusted place to connect, share information and experiences, and find new partners</td>
<td>A repository of cleantech demonstration project sites and related organizations and companies</td>
<td>A curated collection of funding sources, resource libraries, tools, and databases</td>
</tr>
</tbody>
</table>
What is the Platform?

The platform is intended to facilitate connections between people. Users will find project partners, resources, and opportunities through their exploration of the community and based on trusted referrals.

COMMUNITY:

- Local Governments
- Community-Based Organizations
- Startups
- Startup Supporters
- Entrepreneurs
- Mentors
- Investors
Our partners provide leadership, support, resources, and marketing for the platform. In return, the platform offers partners a powerful channel to promote themselves and their community.

**INITIAL SET OF PARTNERS:**

Our earliest partners serve cleantech entrepreneurs and startups.

We welcome additional partners serving other communities!
The platform collects and promotes resources for the community. Examples:

✓ Local governments seeking cleantech grants and requests for proposals

✓ Researchers seeking pilot sites and technology providers for grant opportunities

✓ Community-based organizations, cities, and counties looking to partner with technology developers

**FUTURE RESOURCES & TOOLS:**

*Funding Sources* will include postings for both grant funding sources (Federal, State, university, and private non-equity opportunities) and venture funding sources (e.g., accelerator funds, angel funds, and seed funds).

*Resource Libraries* will contain market research, articles, videos, and other content created or curated around a theme.

*Tools* will include guides, kits, and templates to help startups build their ideas and business while identifying gaps in knowledge.

*Databases* will bring together outside sources with extensive information on startups, investors, and other members of the broader community.
The platform welcomes all types of technology seekers, including community-based organizations supporting disadvantaged communities, to find and share opportunities to pilot the newest cleantech solutions.

**EXAMPLE:** A community-based organization sees a research funding opportunity for microgrids.

The community-based organization finds a microgrid development partner on the site and sends a message about building a project team to build a microgrid for a local community center.


The following demonstration shows several actions the community-based organization could take to pursue an opportunity on the platform.
PART 2: PLATFORM DEMONSTRATION
PART 3: JOINING AND GETTING INVOLVED
Joining & GETTING INVOLVED

- Provide comments to the Navigant / iCatalysts team directly (contact information on the final slide)
- Join our launch list or request a demo at: https://www.icatalysts.org/join cleantechportal/
- Join the EPIC listserv to stay informed of the launch
- After launch:
  - Add your personal profile to the Platform
  - Add your organization to the Platform

We want to hear from local governments and community-based organizations about needs and priorities for the platform
QUESTIONS?
CONTACTS

AMUL SATHE
Director
415.399.2180
amul.sathe@navigant.com

THOMAS JENSEN
iCatalysts
415.377.0543
tjensen@icatalysts.org

LAURA VOGEL
Managing Consultant
415.399.2132
laura.vogel@navigant.com

KATHRYN COLLINS
Senior Consultant
213.670.3232
kathryn.collins@navigant.com
Final Breakout Sessions
Beginning at 3:45pm

Please refer to https://www.energy.ca.gov/calendar/index.php?eID=3183 for WebEx information