



# **8th Annual Symposium**

*Unique Insights into Leading-Edge  
Cleantech Innovations*

**December 1, 2017**

Sibley Auditorium

Bechtel Engineering Center

University of California, Berkeley



# Welcome to the 8th Annual C2M Symposium!

## Agenda

- 8:00 CHECK-IN & NETWORKING/LIGHT BREAKFAST**
- 9:00 WELCOME REMARKS**  
Brian Steel, Co-Director, Cleantech to Market
- 9:15 MORNING PRESENTATIONS**  
Christy Martell, Enterprise Sales Leader, Stem, Inc.
- 9:15 Packetized Energy Technology**  
**9:45 MICRORganic Technologies**
- 10:15 BREAK/NETWORKING**
- 10:45 MORNING PRESENTATIONS**  
Alex Luce, Investor, CreativeVentures.vc
- 10:45 GreenBlu**  
**11:15 Grow Plastics**
- 11:45 - LUNCHTIME KEYNOTE -**  
Ashley Grosh, Senior Relationship Manager, CleanTech  
Corporate Banking Group
- 12:00 LUNCH/NETWORKING**
- 12:45 AFTERNOON PRESENTATIONS**  
Dan Halperin, Director Corporate Strategy, Pacific Gas &  
Electric
- 12:45 eCalCharge**  
**1:15 Sunvapor**
- 1:45 AWARDS VOTING & PRESENTATIONS**
- 2:00 RECEPTION WITH LIGHT REFRESHMENTS**
- 3:00 PROGRAM CONCLUDES**



# Dynamic Partnership

Cleantech to Market (C2M) is a partnership between graduate students, entrepreneurs, researchers, and industry professionals to help accelerate the commercialization of emerging cleantech. In the process, C2M also develops the next generation of innovative cleantech leaders.

## Entrepreneurs & Researchers

C2M first evaluates and selects promising cleantech inventions from existing startups, leading universities, and Department of Energy labs and programs.

## Graduate Students

C2M then handpicks graduate student commercialization teams from over 20 UC Berkeley disciplines, including business, engineering, science, law, policy, and the Energy and Resources Group. C2M strategically matches their academic and work experience with each project.

## Cleantech Professionals

C2M supports the teams with leading cleantech professionals who bring deep subject matter expertise (e.g., batteries and related components and controls, electric grid operations, economics, early stage venture). They help guide the students as speakers, mentors, and contacts.

## Innovation in Action!

The result is 1,000 hours of technology evaluation and market assessment for each project. Students experience the rewards and challenges of taking cleantech to market; entrepreneurs and researchers gain valuable market feedback on their technologies and business plans; and professionals engage with fresh talent and new ideas.



# Thank You!

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# Keynote Speaker



**Ashley Grosh** is a 14-year Wells Fargo veteran, currently serving as Senior Relationship Manager, CleanTech Corporate Banking Group. Previously, she was Vice President and Environmental Affairs Business Initiatives Manager, where she managed a \$100 million environmental philanthropy program for the company's sustainability

initiatives. Ashley began her Wells Fargo career as an Investment Management Associate with the Wealth Management Group, working with high net worth individuals on financial solutions and alternative energy investments. Ashley helped launch two national grant programs – the Environmental Solutions for Communities grant program and the Clean Technology and Innovation grant program – both designed to further the connection between the company's environmental initiatives and sustainability efforts led by customers, local communities, clean technology organizations, universities, and research labs. Starting in 2014, Ashley co-led the development of the Innovation Incubator (IN2)—a unique, ten-year, \$30 million joint venture with the National Renewable Energy Laboratory (NREL) that provides clean building technology startups with technical and financial assistance to advance commercialization. A popular speaker, judge, and mentor for accelerator and business plan competitions across the country, Ashley also serves on the national board of the Cleantech Open and the Investment Advisory Board for NREL.

Ashley earned a B.A. degree in Economics with a minor in Finance from the University of Colorado at Boulder as an athlete on the university's NCAA Division One women's soccer team. She also holds a certified financial planning certificate from DePaul University and an energy certificate from the LEEDS School of Business at her alma mater in Boulder.

Ashley resides in Colorado with her husband and two children.



# Team



**Brian Steel** is Co-Director of the Cleantech to Market program to which he brings 30 years of business innovation and leadership experience. He is a member of the Haas "Club of 6" for teaching excellence. Brian is a member of the external advisory board of the Innovation Incubator (a Wells Fargo/NREL joint

venture). He has also served as a Senior Advisor to Renewable Energy Trust and as an advisor to the Department of Energy, working on both renewable energy financing and solar initiatives. Prior to joining the UC Berkeley faculty in 2011, Brian was Vice President of Corporate Strategy & Development for PG&E Corporation, where he led the energy industry's first tax-equity solar project financing by an investor-owned utility, investing \$400 million in nearly \$1 billion of photovoltaic assets from 2010-2011.

Prior roles include Chairman, International, Pandora Media – the world's leading Internet radio company; President, International, Overture Services – building a billion-dollar division of Yahoo! with operations in 20 countries; President and CEO, Idealab Silicon Valley and Managing Director of Idealab; and President and COO, On Command. Previously, Brian was Senior Vice President and co-head of Real Estate Merchant Banking at Shearson Lehman Brothers. He has served on the boards of more than 20 early-stage technology companies, several of which went public, and many of which had successful acquisition exits. His separate angel investments include Back to the Roots, Birdies, LiveOps, and Powerset (sold to Microsoft).

Brian holds a B.A. magna cum laude in Economics from Duke University, where he was an Angier B. Duke Scholar.



# Team



**Beverly Alexander** is the Founding Director of the Cleantech to Market program, and has been involved in energy and environmental innovation for almost 30 years. Bev serves as an advisor to the Berkeley Energy & Resources Collaborative, and won the 2013 Berkeley Haas Best Case award for a cleantech

commercialization case study. She is also a member of the Haas Club of 6 for excellence in teaching. As a Senior Vice-President at Pacific Gas & Electric Company, she was in charge of customer services and the then largest energy efficiency, solar, and demand response programs in the United States. Those programs moved \$1.2 billion into the California economy and won over 75 awards, including the United States Department of Energy's Energy Star Sustained Excellence award. Bev also held Director, Chief Counsel, and Vice President positions in generation, transmission, distribution and customer services, with a focus on leadership development and strategic planning.

Before PG&E, Bev specialized in emerging environmental law and policy. The National Law Journal recognized her as one of the top 40 attorneys under the age of 40 in the United States for her pioneering work. After PG&E, Bev consulted on clean energy solutions, including sustainable communities.

Bev received her B.A. in Environmental Studies from UC Santa Cruz and her J.D. from UC Berkeley, where she was Editor-in-Chief of Ecology Law Quarterly, and clerked on the United States Ninth Circuit Court of Appeals.



# Team



**William Shelander** joins the C2M faculty in 2016 after serving as an advisor and mentor to the program since 2010. Bill brings hands-on proficiency at the earliest stages of emerging technologies and venture funding. He is also developing and teaching the Environmental Entrepreneurship and

Innovation program at Stanford University's School of Civil and Environmental Engineering introducing methods and insights to conceive and implement economically viable enterprises enabling environmentally sustainable systems. Bill was a commercialization expert for LBNL (2010-2015) working with researchers in fundamental energy science to utilize discoveries in new business activities and helped create and obtain external funding for dozens of start ups involving diverse technologies (from industrial-scale microbiology and DNA diagnostics to thin film oxides and high performance supercomputers).

In 2013, Bill served on a White House Office of Science & Technology Policy panel to improve technology transfer of basic research. Between 1986 and 2007, he was a managing director of venture capital funds from the U.S., Japan, Taiwan and China (IRR exceeding 65%, generating returns of over \$600,000,000). He has served on the boards of NASDAQ-listed companies and helped early stage ventures develop business plans and obtain first round funding. As an entrepreneur, Bill is currently a co-founder of three start-ups involving molecular biology detection and treatment of Alzheimer's disease.

Bill holds an MBA from Stanford University, an M.S. Engineering from West Virginia College of Graduate Studies, and a BS Systems Engineering from the Georgia Institute of Technology.



# 2017 Projects

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## 9:15 Packetized Energy Technology

Packetized Energy Technology (PET) is a software and hardware platform that manages distributed energy resources. It can address the most pressing challenges to the integration of renewable energy on the grid. PET utilizes a bottom-up approach with a patent-pending algorithm to ensure end-user quality of service, grid security, and user privacy in an automated and scalable control system.

### Website

<http://www.packetizedenergy.com/>

### Founders

**Mads Almassalkhi**, Co-Founder

**Jeff Frolik**, Co-Founder

**Paul Hines**, Co-Founder

**Andrew Giroux**, Chief Engineer

**John Slinkman**, Senior Software Engineer

### C2M Student Team

**Chris Roberts**, MBA 2018, Team Lead

**Priya Aggarwal**, M.Eng 2018

**Steve Drapcho**, PhD Physics 2019

**Thomas Ledolter**, MBA 2018

**Joe Willer**, JD 2019



# 2017 Projects

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## 9:45 MICROrganic Technologies

Municipal wastewater treatment in the U.S. uses more electricity than the installed capacity of wind and solar combined. MICROrganic's patent-pending VIVA Microbial Fuel Cell technology replaces aeration – the most energy-intensive process in wastewater treatment – with a modular, energy-neutral treatment solution. With a pilot already installed and a proven, scaled manufacturing platform, MICROrganic is beginning commercialization with the craft brewery market.

### Website

<http://microrganictech.com/>

### Founders

**Carol Maxwell**, CEO and Director

**Brent Solina**, CTO

### C2M Student Team

**Maxwell Kushner-Lenhoff**, MBA 2018, Team Lead

**Kyohei Mukaigawa**, MBA 2018

**Jeremy Nowak**, PhD Physical Chemistry 2019

**Wojciech Osowiecki**, PhD Physical Chemistry 2019

**Alexander Prosser**, MBA 2018



# 2017 Projects

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## 10:45 GreenBlu

GreenBlu offers a cost-effective, off-grid water treatment solution that can be applied to a variety of markets. Through materials innovations, GreenBlu's modified thermal distillation cycle produces potable water from seawater or wastewater, lowering the cost of water treatment and reducing its environmental impact. This double bottom line benefit makes GreenBlu an exciting technology in several water treatment applications.

### Website

<https://greenblu.co/index.html>

### Founders

**Howard Yuh**, Co-founder and CEO

**Kevin Tritz**, Co-founder and COO

**Ethan Schartman**, Co-founder and CTO

### C2M Student Team

**Kevin Benson**, MBA 2018, Team Lead

**Alex Angola**, MBA 2018

**Nityan Nair**, PhD Physics 2018

**Chenlu Xie**, PhD Physical Chemistry 2018



# 2017 Projects

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## 11:15 Grow Plastics

There is an increasing demand for more sustainable plastics, but the current alternatives do not perform as well as conventional plastics. Grow Plastics creates sandwich panel structures in bioplastics that enable stronger, lighter products than comparable technologies. This technology has a wide variety of applications including food packaging and performance sports products.

### Website

<http://growplastics.com/>

### Founder

**Michael Waggoner**, CEO

### C2M Student Team

**Sofía Ramos-Guerrero**, MBA 2018, Team Lead

**Sharifa Dunn**, MBA 2018

**Stephen Meckler**, PhD Physical Chemistry 2018

**Tamara Sparks**, PhD Physical Chemistry 2018

**Johnny Truong**, PhD Chemistry 2018



# 2017 Projects

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## 12:45 eCalCharge

eCalCharge develops and implements strategies for electric vehicle smart charging. The company brings together data from electric vehicles, power networks and charging infrastructure to unlock the value of electric vehicle mobility data. eCalCharge transforms fleets of electric vehicles into virtual power plants and designs the most valuable energy management strategies for automakers, EV drivers and the energy sector.

### Website

<http://ecalcharge.com/>

### Founder

**Caroline Le Floch**, CEO

### C2M Student Team

**Kyle Bertin**, MBA 2018, Team Lead

**Brendan Folie**, PhD Physics 2018

**Matt Gilbert**, PhD Physics 2018

**Scarlett Hendrichs**, MBA 2018

**Emily Porter**, PhD Civil Engineering 2020



# 2017 Projects

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## 1:15 Sunvapor

A whopping 75% of energy consumed in the global industrial sector is used for process heat. Unfortunately, this under-discussed source of energy demand hasn't seen the same renewables revolution as electric power. Sunvapor aims to break this barrier through its design of a disruptively low cost concentrated solar thermal array - an innovation that can revolutionize the industrial energy landscape.

### Website

<http://www.sunvapor.net/index.html>

### Founder

**Philip Gleckman**, CEO

### C2M Student Team

**David Sternlicht**, MBA 2018, Team Lead

**Mariana Martinez Alarcon**, MBA 2018

**Natalie Gibson**, PhD Chemistry 2018

**Kurt Kurzenhauser**, JD 2019

**Francois-Jerome Selosse**, MBA 2018

**Beryl Xia**, PhD Chemistry 2019

