

# Main Event

## Speakers

### Jeffrey Byron, Commissioner California Energy Commission

Jeffrey D. Byron was appointed to the California Energy Commission by Governor Schwarzenegger in June 2006. Commissioner Byron represents the public-at-large position with over 30 years of experience in the electric power industry. He serves as Presiding Member of the Energy Commission's Electricity and Natural Gas Committee, the Siting Policy Committee, the Integrated Energy Policy Report Committee, and as the Associate Member on the ad hoc committee for the joint greenhouse gas reduction proceeding with the CPUC. Commissioner Byron received a Bachelor and a Master of Science degree from Stanford University.

### Michael Liebreich, Chairman and CEO New Energy Finance

Michael Liebreich is Chairman and Chief Executive of New Energy Finance, the leading independent provider of information and research to investors in clean energy and the carbon markets. Michael serves in a number of advisory roles, such as Member of the World Economic Forum's Global Agenda Council on Alternative Energies, Advisory Board Member for the Energy and Climate Change working group for the Clinton Global Initiative (CGI) and Steering Group Member for a number of IEA RETD projects. Michael is a frequent keynote speaker, Chair of the annual New Energy Finance Summit and Co-Chair of Renewable Energy Finance Forum Wall Street 2008.

Prior to founding New Energy Finance in 2004 Michael helped to build over 25 companies as a venture capitalist, entrepreneur and executive. Michael earned a Master of Arts in Engineering with First Class Honors from the University of Cambridge and has an MBA from Harvard Graduate School of Business.

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# ENERGY STORAGE

ENHANCING THE VALUE  
OF RENEWABLES

LAWRENCE HALL OF SCIENCE  
MAY 6, 2009 + 12-7PM

# Overview

## Berkeley Stanford CleanTech Conference Series: Energy Storage: Enhancing the Value of Renewables

This is the third in a continuing series of focused conferences highlighting clean technology solutions to address the planet's multifaceted energy challenges. This third installment is made possible through the UC Berkeley Center for Energy & Environmental Innovation and through student support from the Berkeley Energy Resources Collaborative (BERC) and Stanford University Energy Crossroads.

This conference will provide:

- + A clear understanding of the current challenges and opportunities in utility scale and distributed energy storage.
- + Attract, integrate and cross-pollinate projects and ideas between the various schools at UC Berkeley and Stanford University.
- + Create a framework for seeding the development and growth of next-generation energy storage technologies.

This conference topic will focus on the role of energy storage on enhancing the value of renewable energy sources, which are usually intermittent or unpredictable. Attendees will represent researchers, energy storage companies, renewable energy companies, utilities and policymakers.

## Program – May 6, 2009

12:00 - 1:00pm <b>Registration</b>	4:45 - 5:10pm <b>Guest Speaker: Michael Liebreich, Chairman and CEO of New Energy Finance</b>
1:00 - 1:20pm <b>Welcoming Remarks (BERC, CEEI, EC)</b>	5:10 - 6:00pm <b>Closing Keynote: Commissioner Jeff Byron, California Energy Commission</b>
1:20 - 2:50pm <b>Policy Panel</b>	6:00 - 7pm <b>Wine and Cheese Reception</b>
2:50 - 3:15pm <b>Networking Break</b>	
3:15 - 4:45pm <b>Technology Panel</b>	

# Panelists

## Moderators

### **Nadeem Sheikh, Engagement Manager, McKinsey and Co.**

Nadeem is an Engagement Manager in McKinsey's San Francisco Office, where he is a core member of the Firm's Clean Tech Practice. Nadeem also helped launch McKinsey's Climate Change Special Initiative, a cross-industry and cross-functional initiative within the Firm focused on the business impact of climate change. In addition to his expertise on the impacts of clean technology on the transport and power sectors, Nadeem has assisted clients across a range of industries with operational and organizational improvement efforts.

Nadeem graduated from the University of Wisconsin-Madison with Distinction in Industrial Engineering, and obtained his MBA from the University of California-Berkeley.

### **Pramod Kulkarni, California Energy Commission**

Pramod Kulkarni has worked at the Energy Commission since 1990 and has been actively involved with renewable energy, energy storage, RD&D financing, technology assessment and commercialization programs. Prior to joining the Commission Mr. Kulkarni worked in the field of energy technology development, project finance and in the finance department of a Fortune 100 company. His educational background includes an MBA, a MS and a BS.

## Policy Panel

### **Dr. Ed Cazalet, Vice-President, Megawatt Storage Farms**

Dr. Ed Cazalet has over forty years of electric power and related experience as an executive, board member, consultant, and entrepreneur. He combines this electric industry experience with energy experience in the gas, oil, coal and nuclear industries. He has worked in the telecommunications, banking, chemicals, and office machine industries, and has been a consultant and participant in the development of state and federal energy and environmental policy.

Dr. Cazalet is founder of MegaWatt Storage Farms, which develops and operates grid-scale electricity storage farms, amongst other companies, and was recently a member of the Board of Governors of the California Independent System Operator. He holds a Ph.D. from Stanford University in economics, decision analysis and power system planning.

### **Annabelle Louie, Emerging Clean Technology Policy, PG&E**

Annabelle Louie works in the Emerging Clean Technology Policy department at PG&E. She is responsible for identifying and supporting emerging technologies that expand the renewable energy potential available to PG&E. Annabelle manages efforts across a broad range of technologies, with a particular focus on energy storage, advanced geothermal energy, and hydroelectricity. Her current energy storage activities include developing opportunities to demonstrate utility-scale storage technologies, and working with policy makers and industry leaders to address barriers to energy storage deployment in California.

Annabelle has held positions in consulting, education and the legal field. She holds an MBA from the Haas School of Business, and Bachelor's degrees in Mass Communications Business Administration from UC Berkeley.

### **Sven Thesen, Communications and Technology, Better Place**

Sven Thesen joined Better Place in April 2008 being responsible for driving the company's sustainability vision and strategic relations with key utilities.

Before joining Better Place, Thesen managed PG&E's sulfur hexafluoride emission reduction team and assisted the UN in revising the Guidelines for National Greenhouse Gas Inventories as part of the IPCC – which was awarded the 2007 Nobel Peace Prize. In his most recent post at PG&E, Thesen directed the Electric Drive Group, which demonstrated for the first time Vehicle to Grid technology.

Thesen received his Bachelor of Science in Chemical Engineering from North Carolina State University and received the 2006 California Governor's Environmental and Economic Leadership Award.

### **Eric Wesoff, Senior Analyst, Greentech Media**

Eric Wesoff is a senior analyst at Greentech Media where he covers the financing and technology of renewable energy and cleantech markets. His clients and networks include the leading investors and public and private companies in renewable energy. Prior to joining Greentech Media, Eric Wesoff founded Sage Marketing Partners in 2000 to provide sales and marketing-consulting services to venture-capital firms and their portfolio companies in the alternative energy and telecommunications sectors.

Eric's expertise covers solar power, fuel cells, biofuels and advanced batteries, and frequently consults for energy startups and Silicon Valley's premier venture capitalists.

### **Marianne Wu, Partner, Mohr Davidow Ventures**

Marianne Wu is a Partner at MDV where she focuses on Cleantech investments. These involve significant technology or business model breakthroughs applied to large, evolving markets such as solar, biofuels and chemicals, clean coal, energy efficiency and water treatment and management. She leverages a decade of technology development and business experience to help entrepreneurs build meaningful, successful businesses. At MDV, she works closely with a number of the portfolio companies including ZeaChem and Catilin.

Prior to joining MDV, Marianne was VP Marketing at ONI Systems and a consultant at McKinsey and Company. She has conducted research in materials, devices, and systems and started her career as a design engineer at Nortel. Marianne earned Ph.D. and MS degrees from the School of Engineering at Stanford University.

## Technology Panel

### **Nick Hodson, Principal, McKinsey & Co.**

Nick Hodson is a Principal with McKinsey and Company based in the San Francisco office. Nick has over twelve years of consulting experience concentrating on energy in general and downstream petroleum in particular.

Nick is a frequent speaker on the greenhouse gas abatement challenge at climate change events on the West Coast. Within McKinsey, Nick co-leads the Firm's research and client work on energy storage sector globally. He is also active in knowledge development efforts focused on automotive propulsion and biogas.

Nick won a scholarship at Oxford University where he read Geology and subsequently earned an MBA from INSEAD.

### **Dr. Craig R. Horne, CEO, EnerVault Corporation**

Dr. Craig R. Horne is CEO and Co-Founder of EnerVault Corporation, a start-up company developing next generation energy storage solutions for the grid and renewable energy installations. Craig's twenty-one year commitment to cleantech has resulted in a career spanning solid oxide fuel cell, Li-ion battery, Pb-acid battery, and redox flow battery technologies. During his career he has served leadership roles at NanoGram Corporation, NeoPhotonics, Kainos Energy, and World Energy Labs. Craig has also served on several Technical Advisory Boards, has been published numerous times, and awarded 14 US patents. His degrees in Materials Science and Engineering are from the Univ. of Florida (BS), UCLA (MS), and UC Berkeley (PhD).

### **Haresh Kamath, Senior Project Manager, Electric Power Research Institute**

Haresh Kamath is a Senior Project Manager in the Power Delivery and Utilization (PDU) Sector at the Electric Power Research Institute (EPRI). His current research activities focus on the development, assessment, and application of energy storage technologies for transportation and stationary applications. He also serves as the Strategic Program Manager for Materials for End Use and Power Delivery in EPRI's Technology Innovation program.

Mr. Kamath received his BS and MS degrees in chemical engineering from Stanford University.

### **Dr. Mohit Singh, Director of Technology, Seeo**

Dr. Mohit Singh is Founder and the Director of Technology at Seeo, a Berkeley start-up developing a new class of high-energy rechargeable lithium batteries that offer unprecedented safety and lifetime. The team at Seeo is revolutionizing electricity storage and delivery, using a technology originally developed through collaboration between UC Berkeley, and LBNL's Batteries for Advanced Transportation Technologies program. As a post-doctoral fellow at LBNL, Dr. Singh discovered a novel nano-structured polymeric electrolyte, both extremely safe and stable against battery electrodes. Dr. Singh holds a BS in Chemical Engineering from the Indian Institute of Technology, and a Ph.D. in Chemical and Biomolecular Engineering from Tulane University, where he examined the self assembly of soft nano-materials, and their applications in drug delivery. Dr. Singh has several international publications, and patents, and is a leading authority in the field of energy storage.

### **Andrew Wang, Senior Development Manager, SolarReserve**

Andrew Wang has 15 years of commercial and technical experience in the clean energy sector. Mr. Wang is Senior Development Manager at SolarReserve, leading provider of utility-scale concentrating solar power (CSP) systems that integrates molten salt thermal energy storage. Prior to SolarReserve, Mr. Wang successfully negotiated over 800 MW and managed over 2,200 MW of wholesale power purchase agreements at Southern California Edison, a major investor-owned utility and leading buyer of renewable power in the United States. Mr. Wang holds a BS in Mechanical Engineering from UC Berkeley, an MS in Environmental Engineering from Stanford University and an MBA from the Anderson School at UCLA.