



The Future of Energy & Water in the Wine, Food & Beverage Industry

December 16, 2015

UCDAVIS
ENERGY EFFICIENCY CENTER

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VITICULTURE & ENOLOGY

Overview

This event offers a unique opportunity for members of the Energy Efficiency Center's Board of Advisors and Special Guests to meet and network with executive leaders of the California wine, food, and beverage industry (particularly those affiliated with the UC Davis Food Science & Technology and Viticulture & Enology departments) and relevant public agencies, to discuss issues pertaining to sustainable and efficient food and beverage processing in the country's agricultural heartland. Meaningful discourse will take place over the course of two hours of moderated panel discussions. Networking and informal discussions will take place immediately following during a wine tasting reception and dinner. Participants will also have the opportunity to tour the LEED Platinum Teaching and Research Winery and new Jackson Sustainable Winery Building to see state-of-the art Zero-Net Energy and Zero-Net Water solutions and best practices.



Wednesday, December 16, 2015

3:00 pm **Tour of the Jess Jackson Sustainable Winery Building**

4:00 pm **Welcome**
Roger Boulton, UC Davis

4:10 pm **Panel Discussion 1—Understanding Customer Needs**

The afternoon's first panel discussion will focus on the customer-end of the equation and will feature panelists that represent the wine, food and beverage industries. Panelists will be asked to spark the discussion by speaking about their sustainability and efficiency efforts and discuss both successes and challenges. The California drought is of specific concern, and this panel will include a discussion on water recycling and waste-water processing in addition to needs for cost-effective energy solutions.

Moderator: **Chris Simmons**, UC Davis
 Thomas Maulhardt, Campbell Soup
 Daniel Sonke, Campbell Soup
 Greg Steltenpohl, Califia Farms
 Bryan Warren, SoCalGas
 Ted Wells, Trinchero Family Estates

5:15 pm **Panel Discussion 2—Infrastructure Integration and Planning**

The second panel will pivot the group's attention to energy and water service providers and will host panelists from some California utilities. Topics will include short- and long-term efficiency programs and policies, the realities of operating and maintaining distribution systems that serve wine, food, and beverage industries, and ways in which consumers can make the best choices and capital investments. This conversation will necessarily include the topics of grid and infrastructure integration as well as rate design.

Moderator: **Ned Spang**, UC Davis
 Elisabeth Brinton, PG&E
 Grant Davis, Sonoma County Water Agency
 David Hochschild, CA Energy Commission

6:15 pm **Wine Tasting Reception**

7:30 pm **Dinner**



Elisabeth Brinton

Elisabeth S. Brinton is Vice President, Corporate Strategy for Pacific Gas and Electric Company. Brinton joined PG&E in the fall of 2014 and is responsible for corporate strategy and corporate development. Most recently, she was Executive Vice President of Operations for C3 Energy. Prior to that, Brinton was Chief Customer Officer for SMUD, where she ran the vertically integrated utility's \$2 billion retail business. Earlier, Brinton was a senior executive in three successful startups, and was also founder and CEO of her own company in Silicon Valley, BPR, which she grew and successfully sold. Out of college, she worked on Capitol Hill for a member of Congress and for the House Judiciary Committee, staffing both environmental and energy policy issues. Brinton holds three bachelor's degrees from Principia College, is a Harry S. Truman Scholar, and a graduate of Singularity University's Global Executive Program. Brinton now serves as the co-chair for Singularity University's Energy and Climate Program.

Roger Boulton

Roger Boulton is a Professor and Stephen Sinclair Scott Endowed Chair in Enology in the Department of Viticulture and Enology. He studies the chemical and biochemical engineering aspects of winemaking and distilled spirits production. His work involves fermentation and reaction kinetics; physical and chemical stability of wines; the mathematical modeling, computer simulation and control of enological operations; winery design (winemaking equipment selection, winery design and layout) and the economics of investment and operation. In 2000, Boulton was named among "the 50 Most influential people in the US Wine Industry" by Wines and Vines Magazine. In 1998, he and three colleagues (Vernon Singleton, Linda Bisson and Ralph Kunkee) received the Office International de la Vigne et du Vin (OIV) Prize in Oenology for their text *The Principles and Practices of Winemaking*. Boulton has significant international involvement in the development of enology curricula, the teaching of short courses and advising wineries throughout the world. He received both his Bachelor's and Ph.D. in Chemical Engineering from the University of Melbourne, Australia.

Grant Davis

Grant Davis is General Manager of the Sonoma County Water Agency. He is responsible for management activities related to the Water Agency's core functions of providing drinking water to over 600,000 residents in portions of Sonoma and Marin counties, wastewater management for 60,000 customers, maintaining nearly 100 miles of streams and detention basins for flood protection, and restoring habitat for three federally listed fish species in the Russian River. Davis and his team are also implementing a renewable energy portfolio that has resulted in a carbon free water supply and distribution system. The Water Agency is a regional leader in the development and implementation of federal and statewide initiatives, such as the North Coast and San Francisco Bay Area Integrated Regional Water Management Program, Water Bond Coalition, and the Pacific Coastal Salmon Restoration Fund.

Prior to joining the Water Agency, Davis was Executive Director of The Bay Institute, a science-based nonprofit, dedicated to protecting the San Francisco Bay-Delta Watershed and improving water management in California. He received his BA in political science from the University of California at Berkeley.





David Hochschild

David Hochschild was appointed to the California Energy Commission by Governor Jerry Brown in February 2013. Commissioner Hochschild's career has spanned public service, environmental advocacy and the private sector. He first got involved in the solar energy field in 2001 in San Francisco as a Special Assistant to Mayor Willie Brown where he launched a citywide \$100 million initiative to put solar panels on public buildings. He went on to co-found the Vote Solar Initiative, a 60,000-member advocacy organization promoting solar policies at the local, state and federal level. He served as executive director of a national consortium of leading solar manufacturers and worked for five years at Solaria, a solar company in Silicon Valley. In 2007-2008, he served as a commissioner at the San Francisco Public Utilities Commission. Commissioner Hochschild holds a B.A. degree from Swarthmore College and a Masters of Public Policy degree from Harvard's Kennedy School of Government and was a Coro Fellow in Public Affairs.

Thomas Maulhardt

Thomas Maulhardt has worked as an Environmental Supervisor for Campbell Soup Supply Co., LLC for the past 5 years in their tomato processing plants in Dixon and Stockton. In addition to overseeing all aspects of environmental compliance for both facilities, he also manages projects to reduce the environmental footprint of the manufacturing operations. These efforts have led to a 35% reduction in fresh water use per unit of production and significant improvements in energy efficiency. Campbell was recently recognized by the California Energy Efficiency Industry Council, who presented them with their 2015 Energy Champions Award. Maulhardt co-led Campbell's agriculture manufacturing sustainability team in California with Dan Sonke. He holds a B.S. in Biology from the University of Washington, and has previously worked in the fields of biomedical research and green building, in addition to food processing.

Christopher Simmons

Christopher Simmons, an Assistant Professor in the UC Davis Department of Food Science and Technology, specializes in energy and water efficiency in food processing. Simmons worked two years as a postdoctoral scholar at UC Davis and the Department of Energy's Joint BioEnergy Institute, researching biofuels and sustainable agriculture. Simmons' research focuses on improving energy and water-use efficiency in food processing. He is interested in improving strategies to convert leftover food residue from food processing into biofuels that can offset energy used during processing. He additionally investigates methods to use food processing wastewater for agricultural irrigation. Simmons holds a Ph.D. in biological systems engineering from UC Davis.

Daniel Sonke

Daniel Sonke is Manager of the Agriculture Sustainability Program for Campbell Soup Company. He grew up working on his family's almond farm near Ripon, California. An expert on environmental issues in agriculture, Sonke has previously served as Assistant Integrated Pest Management Coordinator for the University of Florida, Director of Science for Protected Harvest, and Senior Scientist for SureHarvest, Inc. His Doctorate in Plant Medicine (D.P.M.) is a cutting edge professional degree in crop health management from the University of Florida. Sonke has developed sustainable agriculture programs for fruits, vegetables, mushrooms, and nuts, including the California Almond Sustainability Program. He was hired in 2011 by Campbell Soup Company as Manager of Agriculture Sustainability Program to develop the company's approach to sustainability in agriculture. In this role, he works with vegetable farmers and other ingredient suppliers to track, encourage and enable sustainability progress. Sonke also serves as a resource for the company on agricultural issues.

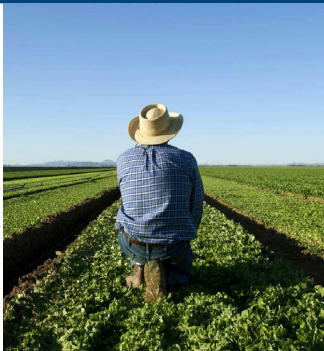
Edward Spang

Edward (Ned) Spang is the Associate Director of the UC Davis Center for Water-Energy Efficiency and an Assistant Professor in the Food Science and Technology Department. His research focuses on characterizing and optimizing the efficiency of linked water, energy, and food resource systems. Spang is particularly interested in applying methodologies to measure and monitor these systems and their interrelationships in high-resolution and across multiple scales. He also seeks to understand the influence of markets, innovation, and policy on the integrated food-water-energy nexus. Spang's recent publications explore mapping energy flows through water infrastructure, enhancing the conservation signal and stability of water rates, and estimating global water consumption for energy production. He earned his M.A. and Ph.D. from the Fletcher School of Law and Diplomacy, Tufts University.

Bryan Warren

Bryan Warren has 25 years of utility engineering experience; beginning in generation maintenance for LADWP, and currently with SoCalGas' Customer Programs and Assistance. Bryan supervises a team of 10 engineers delivering custom commercial and industrial assessments, and evaluating potential savings using field observations and engineering estimates. The engineering team annualizes energy efficient improvements and benefits during post installation reviews. In addition, the SoCalGas' technical team maintains regular communication with our utility piers, and with CPUC commission staff and their consultants. Warren received his B.S. in mechanical engineering from California State University and his MBA from Pepperdine University.





Greg Steltenpohl

Greg Steltenpohl is co-founder and CEO of Califia Farms. He has led the company's rapid growth as a leader of premium, natural beverages. The company was named Brand of the Year by BevNet in 2015, recognized as a 'Top Ten Challenger Brand' by Seurat Group and one of 8 'Breakout Brands' by Beverage World for 2015. Steltenpohl was recently dubbed an 'eco-friendly revolutionary' and named one of the Top 50 Disrupters in the beverage industry in 2015. He is also leading Califia's commitment to sustainability, including cutting Califia's plant water usage by half, and supporting the Xerxes Project. Steltenpohl is founder and former CEO of Odwalla Inc., the leading U.S. supplier of fresh juice and nourishing beverages. Prior to Califia, Greg was the co-founder and CEO of Adina for Life Inc., a venture-backed startup focused on building a fair trade brand with a good for you, good for the planet mission in the natural beverage category.

Ted Wells

Ted Wells is the Environmental Compliance Engineering Manager at Trincherro Family Estates in Lodi, California. Previously, he was manager of environmental projects for Gates Corporation, the world's leading manufacturer of power transmission belts and a premier global manufacturer of fluid power products. Wells also worked in environmental and sustainability management for Pella Corporation, United Airlines, and Dames and Moore. He received his BA in engineering and public policy from Washington University in St. Louis.

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