

ENERGY EFFICIENCY IN THE RESIDENTIAL SECTOR

PRACTICE, POLICY, PROSPECTS

THURSDAY 09.08 2011 | DAVID BROWER CENTER, BERKELEY



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& TRANSIT**
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A CONFERENCE HELD IN COLLABORATION

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Goldman School of Public Policy, UC Berkeley
University of California Center for Energy and Environmental Economics
California Public Utilities Commission

**Energy Efficiency in the Residential Sector:
Practice, Policy, Prospects**

Thursday, September 8, 2011

David Brower Center, Berkeley

- 7:30am** **Registration Opens; Continental Breakfast**
- 8:30am** **Welcome & Introductions**
Jennifer Wolch, Dean, College of Environmental Design, UC Berkeley
John M. Quigley, I. Donald Turner Distinguished Professor, UC Berkeley
- 8:45am** **Sustainable Residential Energy Use: Design, Feasibility, Performance**
Moderator: Charles Eley, consulting architect and engineer
Panelists:
Matt Golden, Recurve Inc.
Alan Sanstad, LBNL
Nehemiah Stone, The Benningfield Group
Susan Ubbelohde, UC Berkeley
- 10:15am** **Break**
- 10:30am** **Energy Efficiency in Affordable Housing**
Moderator: Ophelia Basgal, US HUD
Panelists:
Steven Raphael, UC Berkeley
Matthew Schwartz, California Housing Partnership Corporation
Ann Silverberg, BRIDGE Housing Corporation
Wayne Waite, US HUD
- 12 Noon** **Lunch**
- 1:00pm** **Keynote: Energy Innovation in New Single-Family Development**
Lawrence Gotlieb, Vice President & Associate General Counsel, KB Home
- 1:30pm** **Government Participation & Green Housing: Policy, Promotion, Regulation**
Moderator: Matthew Zaragoza-Watkins, California Air Resources Board
Panelists:
Max Auffhammer, UC Berkeley
Cisco DeVries, Renewable Funding, LLC
Heather Larson, StopWaste.org (Alameda County)
Hon. Carla Peterman, California Energy Commission
- 3:00pm** **Break**
- 3:15pm** **Energy Efficient Investment in a Troubled Economy**
Moderator: Catherine Wolfram, UC Berkeley
Panelists:
Jeanne Clinton, California Public Utilities Commission
Scott Henderson, Clinton Climate Initiative
Tony Salazar, McCormack Baron Salazar
- 4:15pm** **Closing Keynote: The Government's Role in Energy-Efficient Housing**
Raphael Bostic
Assistant Secretary for Policy Development and Research, US HUD
- 5:00pm** **Adjourn; Wine Reception**

Participating Speakers

Maximilian Auffhammer is Associate Professor of Agricultural and Resource Economics and Director of the International Area Studies Teaching Program at UC Berkeley. His research focuses on environmental and resource economics, energy economics and applied econometrics. He is a Faculty Research Fellow at the National Bureau of Economic Research in the Energy and Environmental Economics group and a lead author for the Intergovernmental Panel on Climate Change (IPCC). He serves on the editorial board of the *Journal of Environmental Economics and Management*. He is recipient of the 2007 Cozzarelli Prize awarded by the National Academies of Sciences. He holds a BS in environmental science and an MS in environmental and resource economics from the University of Massachusetts at Amherst, and a PhD in economics from UC San Diego.

Ophelia Basgal is Regional Administrator of the Department of Housing and Urban Development's Region IX (Pacific/Hawaii). She is a nationally recognized expert on housing and community development issues, having served 27 years as the executive director of the Housing Authority of the County of Alameda, California. Prior to joining HUD, she was Vice President of Civic Partnership and Community Initiatives at the Pacific Gas and Electric Company. She serves as chair of the board of retirement of the Alameda County Employees' Retirement Association and as a member of the advisory board for the University of California Puente Program. She served as member of the US Millennial Housing Commission. She holds a master's degree in social welfare administration from the University of California, Berkeley.

Raphael Bostic is Assistant Secretary for Policy Development and Research (PD&R) at the US Department of Housing and Urban Development, where he is a key advisor to HUD Secretary Shaun Donovan on overall departmental policy, program evaluations, demonstrations, and research. Dr. Bostic's PD&R team provides information on housing needs and housing market conditions and research on important housing and community development issues. He has served as professor in the University of Southern California's School of Policy, Planning, and Development, where his research focused on credit markets, real estate finance, housing and homeownership. He was Director of USC's Master of Real Estate Development degree program and was the founding director of the Casden Real Estate Economics Forecast. Earlier he worked at the Federal Reserve Board of Governors, where his work on the Community Reinvestment Act earned him a Special Achievement Award. He earned his PhD in Economics from Stanford University and his BA from Harvard University.

Jeanne Clinton is Special Advisor for Efficiency at the California Public Utilities Commission (CPUC), appointed by Governor Jerry Brown. Previously she was Governor Arnold Schwarzenegger's Clean Energy Advisor at the CPUC, during which time she led the California Solar Initiative and guided California's Long-Term Energy Efficiency Strategic Plan. She frequently testifies at the California legislature on energy policy matters. Jeanne has spent her career working on clean energy issues, sustainable development, and climate mitigation in a variety of roles, from government policy and strategy, to utility and government program delivery consulting, both in the U.S. and internationally. She has degrees from Dartmouth College and UC Berkeley.

Cisco DeVries is President of Renewable Funding, helping local and state governments design, administer and finance Property Assessed Clean Energy (PACE) programs and delivering technical assistance for the US Department of Energy. Previously, while serving as chief of staff to Berkeley Mayor Tom Bates, he envisioned and led the initial development of the PACE mechanism. He was an appointee in the administration of President Bill Clinton, serving as an aide to the US Secretaries of Transportation and Energy. He serves on the Board of the Oakland Museum of Children's Art. He holds a bachelor's degree in political science from UC San Diego and a master's degree from the Goldman School of Public Policy at UC Berkeley.

Participating Speakers

Charles Eley is an architect and mechanical engineer with 35 years' experience in energy efficient and sustainable design. He has made significant contributions to the California energy standards, ASHRAE Standard 90.1, and energy codes in Hong Kong, Hawaii, Guam, American Samoa and Australia. The author and technical editor of numerous manuals and standards publications, he is also a Fellow of the American Institute of Architects. He serves on the California Public Utilities Commission's Zero Net Energy Task Force and the San Francisco Mayor's Renewable Energy Task Force, among many other leadership roles. He holds a master's in city planning from UC Berkeley and a bachelor's in architecture from the University of Tennessee.

Matt Golden is Founder and Advisor at Recurve, Inc., a home performance retrofitting firm and a provider of tablet-based energy auditing software for the industry. Matt serves as policy chair of Efficiency First, a national trade association representing 1,200 contractors and manufacturers in the field. Matt serves on the boards of the Building Performance Institute, the National Home Performance Council, and the California Building Performance Contractors Association, and is a member of the US DOE State Energy Efficiency Action Committee. He is the first recipient of the Tony Woods Award for Excellence in Advancing the Home Performance Industry, and was awarded the One-Change Catalyst Award for his nonprofit leadership. He holds a bachelor's degree in foreign relations from Georgetown University and is a licensed California contractor.

Lawrence Gotlieb is Vice President for Government Affairs and Associate General Counsel at KB Home. He advises senior management on legal and policy issues, particularly sustainability and sound environmental practices. He is a former Assistant US Attorney. He serves on the California Workforce Investment Board, the Cal OSHA Standards Board, the Board of Trustees of the California Historical Society, and the Governor's Commission to Build for the 21st Century. He received his bachelors from Dartmouth College and his law degree from Harvard Law School.

Scott Henderson is Director of Finance for the Clinton Climate Initiative's Energy Efficiency Building Retrofit Program. Earlier he worked for a corporate finance advisory firm focused on raising capital for renewable energy and transportation infrastructure projects and as controller and interim CFO for a venture-backed biotechnology firm. Scott began his career in investment banking, having worked for more than seven years in the corporate finance and debt capital markets groups at Merrill Lynch, Dillon Read & Co, and UBS Investment Bank. Scott received his BA from Harvard University.

Heather Larson is a Green Building Program Manager at StopWaste.Org, a public agency in Alameda County. She leads the agency's Technical Assistance and Grants to Nonprofit Housing program, Energy Upgrade CA multifamily deliverables, consultant contracts to develop the GreenPoint Rated program, and the EPA MF Home Energy Retrofit Coordinating Committee. Previously at Heschong Mahone Group, she managed the CA Multifamily New Homes Program sponsored by PG&E and provided analysis on Title 24 code development. She has taught energy efficiency courses at UC Berkeley Extension and at San Jose State University. She holds an MS in design science and sustainable design from the University of Sydney in Australia and a BA in architecture from UC Berkeley.

Carla Peterman was appointed to the California Energy Commission by Governor Jerry Brown in January 2011 and began work in March 2011. She currently presides over the Commission's Renewables Committee and is Associate Member on both its Electricity and Natural Gas Committee and Transportation Committee. She has conducted extensive research on solar photovoltaic markets and climate change at the University of California Energy Institute at the Haas School of Business from 2006-2011 and the Lawrence Berkeley National Laboratory from 2008 to 2010. She also served on the board of directors for The Utility Reform Network (TURN) from 2008-2011, most recently as Board Treasurer. She will complete her doctoral studies this year in Energy and Resources at UC Berkeley. She holds a BA in history from Howard University, an MSc in environmental change and management and an MBA from Oxford University, where she was a Rhodes Scholar.

Participating Speakers

John Quigley is I. Donald Turner Distinguished Professor, and Professor of Economics, at the University of California, Berkeley. Besides the Department of Economics, he also holds appointments in the Goldman School of Public Policy and the Haas School of Business. He directs the Berkeley Program on Housing and Urban Policy. His current research focuses upon: the integration of real estate, mortgage, energy and financial markets; urban labor markets; housing; spatial economics; and local public finance.

Steven Raphael is Professor of Public Policy at the Goldman School at UC Berkeley. His primary fields of concentration are labor and urban economics. Raphael has authored several research projects investigating the relationship between racial segregation in housing markets and the relative employment prospects of African-Americans. Raphael has also written theoretical and empirical papers on the economics of discrimination, the role of access to transportation in determining employment outcomes, the relationship between unemployment and crime, the role of peer influences on youth behavior, the effect of trade unions on wage structures, and homelessness. He received his PhD in economics from UC Berkeley.

Tony Salazar is President of West Coast Operations for McCormack Baron Salazar, overseeing real estate development projects, real estate management, asset management, and the solar and renewable energy venture, Sunwheel Energy Partners. He serves on the boards of Enterprise Community Partners, National Council of La Raza, and Farmworker Justice Inc. Previously he served as director of the California Community Foundation, the Enterprise Social Investment Corporation, the Community Development Research Center at the New School of Social Research, and on the boards of several private sector companies. He also served on Bank of America's National Community Advisory Council. He has a master's degree in social work specializing in administration from the University of Michigan and a BA from the University of Missouri at Kansas City.

Alan Sanstad is Staff Scientist for Environmental Energy Technologies, Lawrence Berkeley National Laboratories. Among his projects at LBL is work in the area of Energy End-Use Forecasting, for the US Environmental Protection Agency (Atmospheric Pollution Prevention Division) and the US Department of Energy (Energy Efficiency and Renewable Energy). These analyses span demand and supply sectors and include assessments of electricity supply-side technologies, Energy Star voluntary programs, minimum efficiency standards, tax credits, market imperfections, technology adoption, and costs of carbon reductions. Sanstad is affiliated with UC Berkeley's Climate and Energy Policy Institute, which provides an interdisciplinary forum for researching the economic and social impacts of climate change.

Matthew Schwartz serves as President and CEO of the California Housing Partnership Corporation in San Francisco. He has worked in the development, planning and financing of affordable housing for twenty years, in both the private and public sectors, and has extensive experience with most government funding programs. Under his leadership, the Partnership has formed a statewide coalition of more than 2,000 nonprofit and local government housing agencies and tenant advocates. He is past president of the board of Housing California and a member of the board of trustees of the National Housing Conference. He was appointed to the San Francisco Housing Authority Commission by Mayor Gavin Newsom in 2008.

Ann Silverberg is Senior Vice President for Portfolio and Capital Markets at BRIDGE Housing, with responsibility for real estate development and asset management. She leads the firm's Portfolio Management Team, with focus areas including deal restructuring, refinancing and rehabilitation. She has served as President of the Board of Directors of the Non-Profit Housing Association of Northern California and chairs its legislative committee. She is also a member of the Board of Governors of the California Housing Consortium. She holds a bachelor's in political science from UCLA and a master's in city and regional planning from UC Berkeley.

Participating Speakers

Nehemiah Stone is a principal at The Benningfield Group, Inc. He is a lead developer for the California Utility Allowance Calculator implemented by the California Energy Commission (CEC) and the state's Tax Credit Allocation Committee. As part of President Obama's transition team, he provided guidance to US HUD on efficiency for affordable multifamily buildings. Earlier he served as a special advisor to members of the CEC and as a chief building inspector at the county level. The author of numerous publications on energy efficiency in residential buildings, he received a bachelor's in economics and environmental studies and an MBA from CSU Sacramento.

Susan Ubbelohde is Professor of Architecture at UC Berkeley. Her recent work includes daylight consulting on the Oberlin College Environmental Studies Center, NIKE European Headquarters and The Gap Corporate Campus. She authored *Inside Out: Design Procedures for Passive Environmental Technologies* and co-edited *Making Environments: Technology and Design*. Her current research focuses on climate and architecture, daylighting design tools, and low-energy design for the California residential industry. She holds the M.Arch. from University of Oregon and a BS in architecture from the University of Michigan.

Wayne Waite has worked as the national Field Manager for Energy and Climate Operations in the Office of Sustainable Housing and Communities at the Department of Housing and Urban Development and currently serves as the Regional Manager Energy for Climate Operations in HUD's Pacific Hawaii Region. As HUD's national field energy manager, he provided policy and technical assistance supporting the delivery of national energy programs and initiatives funded by the Recovery Act and the development of new policies and initiatives addressing regulatory and financial barriers to advancing HUD's energy efficiency priorities. He has helped draft HUD's biennial report to Congress on energy strategy and has served as its field operational liaison to DOE on implementation of the Weatherization Assistance Program and the agencies' partnership. In his capacity as Regional Energy Manager, he has undertaken place-based initiatives directed at increasing investments in energy efficiency and renewable energy technologies within affordable housing markets, as well as facilitating energy partnerships and alliances throughout HUD's Pacific Hawaii Region.

Jennifer Wolch is Dean of the College of Environmental Design and William W. Wurster Professor of City & Regional Planning at UC Berkeley. As a scholar of urban analysis and planning, her work has focused upon urban homelessness and the delivery of affordable housing and human services for poor people. She has also studied urban sprawl and alternative approaches to city-building such as smart growth and new urbanism. Her most recent work analyzes connections between city form, physical activity, and public health, and develops strategies to improve access to urban parks and recreational resources. The founding director of the University of Southern California's Center for Sustainable Cities, she worked to promote sustainable metropolitan development through research, education, and policy outreach programs. She also headed the Green Vision Plan for 21st Century Southern California, a planning guide for habitat conservation, watershed health, and recreational open space. She has authored or co-authored over 125 academic journal articles and book chapters. She was also a recipient of fellowships from the Guggenheim Foundation, the Center for Advanced Study in the Behavioral Sciences, the Rockefeller Foundation's Bellagio Study Center, and other prestigious honors.

Catherine Wolfram is associate professor of business administration at the Haas School of Business, UC Berkeley, and co-director of the Energy Institute at Haas. Her research focuses on the economics of energy markets. She has studied the impact of environmental regulation on energy markets and the effects of electricity industry privatization and restructuring around the world. She received a PhD in economics from MIT. Before joining the faculty at UC Berkeley, she was an assistant professor of economics at Harvard University.

Matthew Zaragoza-Watkins is an air pollution specialist at the California Air Resources Board. His ongoing research in UC Berkeley's Department of Agriculture and Resource Economics focuses on the design of California's landmark cap and trade system, its design of allowance allocation mechanisms, and its integration with other GHG regulations. He holds an MS in business and public policy from UC Berkeley and a BS in Applied Economics and Management from Cornell.

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