



# The 7<sup>th</sup> Annual ACEEE Energy Efficiency Finance Forum

*“Getting to the Mainstream”*  
The Drake Hotel • Chicago, IL • May 13-15, 2013

## Monday, May 13

3:00 pm to 7:00 pm

Registration Open

Palm Court Foyer

5:00 pm to 7:00 pm

Reception

French Room

## Tuesday, May 14

7:00 am to 8:00 am

Breakfast Buffet

Palm Court

7:30 am to 7:00 pm

Registration Open

Palm Court Foyer

8:15 am to 10:45 am

**PLENARY SESSION**

Gold Coast Room

8:15 am **Co-Chairs Welcome**

Joel Freehling, *CB&I*

Bruce Schlein, *Citi*

8:30 am **Introduction**

Steve Nadel, *ACEEE*

8:45 am **Keynote Address**

The Honorable Steven Koch, *Deputy Mayor of the City of Chicago*

9:15 am **The State of Energy Efficiency Financing**

Session Coordinators: Joel Freehling, *CB&I* and Greg Kats, *Capital-E*

Moderator: Joel Freehling, *CB&I*

Presenters: Jonathan Powers, *Office of the Federal Environmental Executive, OMB*

Keith Welks, *Deputy State Treasurer for Fiscal Operations / Senior Advisor for Policy, Pennsylvania Treasury*

Greg Hale, *Senior Advisor to the Chairman of Energy and Finance, Office of the Governor, State of New York*

Charles Laven, *Forsyth Street Advisors*

10:30 am **Recognizing Successes of Financial Allies in the Better Buildings Challenge**

Jonathan Powers, *Office of the Federal Environmental Executive, OMB*

10:45 am to 11:15 am

AM BREAK

Gold Coast Foyer

11:15 am to 12:30 pm

TUESDAY CONCURRENT SESSIONS

Session 1A

Drake Room

### Financing Energy-Efficient Infrastructure

Session Coordinator/Moderator: **Eric Mackres**, *ACEEE*

Presenters: **Karen Weigert**, *City of Chicago*

**Sam Steele**, *City of Fort Worth*

**Scott Bernstein**, *Center for Neighborhood Technology*

Description: Financing for infrastructure projects can support many opportunities for energy efficiency. The purpose of this panel is to highlight several approaches for financing infrastructure projects that ultimately result in energy savings from multiple perspectives.

Session 1B

Parkside

### Potential Role of Master Limited Partnerships and Real Estate Investment Trusts for Energy Efficiency Investment

Session Coordinator: **Felix Mormann**, *University of Miami & Stanford University*

Presenters: **Scott Zimmerman**, *Wilson Sonsini Goodrich & Rosati*

**David Martinelli**, *Harvest Fund Advisors*

**Patrick Dowdall**, *Global Renewable Solutions*

Description: Master Limited Partnerships (MLPs) and Real Estate Investment Trusts (REITs) are both well-established investment structures. There has been recent discussion about opening these structures to renewable energy and energy efficiency investments. This panel will discuss the potential for these structures to advance the market for energy efficiency investment.

Session 1C

Superior

### Designing Effective Programs

Session Coordinator/Moderator: **Chris Kramer**, *Energy Futures Group*

Presenters: **Tilak Subrahmanian**, *Northeast Utilities*

**Stockton Williams**, *HR&A*

**Mark Orlowski**, *Sustainable Endowments Institute*

Description: The purpose of this session is to explore some of the key elements of energy efficiency program design that go beyond rates, terms, and innovative financial structuring. Comparisons across programs to date have typically focused on financing metrics, such as the costs of the financing provided, the average loan size, and the number of loans closed. This session will examine key aspects of energy efficiency financing programs that contribute to successful implementation, such as in-depth market research and identification of a champion to implement an energy efficiency project. In addition, panelists will briefly review 10 key programmatic design elements for residential energy efficiency financing, and 10 steps to a successful green revolving fund for colleges and universities. The common theme will be an emphasis on the importance of building in key programmatic design elements around any financial offering.

**Best Practices in Corporate Finance for Energy Efficiency**Session Coordinator: **Elizabeth Turnbull Henry**, *Adidas Group*Moderator: **Sitar Mody**, *Environmental Defense Fund*Presenters: **Elizabeth Turnbull Henry**, *adidas Group*  
**Sukrit Sehgal**, *Quality Technology Services*  
**Christopher Russell**, *ACEEE*

Description: Our goal is to distill and present some best practices in corporate finance for efficiency. We hope this session empowers corporate energy managers, and the utilities and consultants that support them. A key theme will be the power of a 'portfolio' approach. This concept of bundling long and short payback projects together enables companies to deliver handsome returns and accelerate carbon reductions. We will discuss how and why this works.

Sitar Mody (EDF) will share observations from EDF's Climate Corps Program, pulling insights from their 350 engagements over the last five years. Elizabeth Turnbull Henry will discuss the GreenENERGY Fund and Adidas Group's venture capital portfolio for energy efficiency and distributed energy. Sukrit Sehgal will share how reframing budgeting and centralizing energy management allows QTS to unlock more efficiency opportunities. Christopher Russell (ACEEE) will share insights from his research into the links between efficiency financing and business performance.

**12:45 pm to 2:00 pm****LUNCH****Palm Court****2:00 pm to 3:30 pm****TUESDAY CONCURRENT SESSIONS****Session 2A****Drake Room****Private Sector Strategies for Residential Retrofits**Session Coordinator/Moderator: **Mark Zimring**, *Lawrence Berkeley National Laboratory*Presenters: **Cliff Staton**, *Renewable Funding*  
**Steve Dunn**, *U.S. Department of Energy*  
**Kerry O'Neill**, *Clean Energy Finance Center*

Description: Many states and utility regulators are adopting aggressive energy efficiency targets for existing buildings. Financing has been put forward as a solution to the up-front cost barrier and as a way to stretch public dollars further. Often this accompanies the idea that programs will move from rebates to market rate financing and create a self-sustaining market for comprehensive energy efficiency improvements. However, most programs have struggled with low participation rates, even with below market-rate interest products.

This panel will address several key questions about the current market. Will today's programs bridge the gap and open doors to a self-sustaining market? Are novel financing tools and capital sources necessary to overcome energy efficiency's unique barriers or scale the market? Can attractive financing drive demand at lower cost than other strategies? What is attractive financing?

**C-PACE Project Case Studies: Enhancing Real Estate Value and Performance in the Commercial Sector**Session Coordinator/Moderator: **Sheridan Pauker**, *Wilson Sonsini Goodrich & Rosati*

Presenters: **Derek Brown**, *Clean Fund*  
**Aaron Binkley**, *Prologis*  
**Jeremy Kalin**, *Eutectics Consulting LLC*  
**Scott Reisling**, *Bridge Bank*

Description: The purpose of this session is to examine case studies of commercial PACE deals from the perspectives of property owners, mortgage holders, investors and program administrators. We will explore how PACE has been used as a tool to make energy efficiency projects “financeable” in the commercial sector. A key theme will be an examination of how property owners, banks, and investors view the value of PACE with respect to real estate and loan portfolios.

**Policy Priorities for Advancing Energy Efficiency Financing**Session Coordinator/Moderator: **Suzanne Watson**, *ACEEE*

Presenters: **Brandon Smithwood**, *Ceres*  
**Pat Shaughnessy**, *Pennsylvania Treasury*  
**Scott Johnstone**, *VEIC*

Description: This is a period of rapid innovation for energy efficiency finance. We are seeing many new products emerge on the marketplace, and several different strategies for scaling the market. The purpose of this panel is to discuss how policy can be leveraged to advance the market for energy efficiency finance.

**Money on the Table: Exploring the Forward Capacity Market**Session Coordinators/Moderators: **Carol Mulholland** and **Allison Asplin**, *Cadmus*

Presenters: **Audrey Zibelman**, *Viridity Energy*  
**Allison Becker**, *Northern Indiana Public Service Company*  
**Stephen Moritz**, *AllFacilities Energy Group*

Description: This panel will explore new revenue streams to back energy efficiency-based financing products, such as offering efficiency in the forward market and selling grid reliability as a service. Expert panelists will offer perspectives from the utility, customer, and financial sectors.

**3:30 pm to 4:00 pm****PM BREAK****Sponsored by Wilson Sonsini Goodrich & Rosati****Gold Coast Foyer**

4:00 pm to 5:30 pm

PLENARY SESSION

Gold Coast Room

**The Data Disconnect**

Session Coordinators: **Bruce Schlein**, *Citi* and **Casey Bell**, *ACEEE*

Moderator: **Ted Hesser**, *Saviva Research, LLC*.

Presenters: **Jeff Pitkin**, *NYSERDA*

**Steven Vierengel**, *Citi*

**David Gabrielson**, *PACENow*

**John Rhow**, *Natural Resources Capital Management*

Description: It can be intuitively accepted that energy efficiency loan products are low-risk investments. Yet, attracting secondary market capital has proven a formidable challenge. This panel will discuss current informational barriers to scaling the market for energy efficiency investments.

6:00 pm to 8:00 pm

Cocktail Reception

Palm Court

7:30 pm -

ALLY Reception and Dinner

Drake Cape Cod Room

*(This reception and dinner is for current ACEEE Ally members only)*

**Wednesday, May 15**

**7:00 am to 8:00 am**

**Breakfast Buffet**

**Palm Court**

**7:30 am to 5:00 pm**

**Registration Open**

**Palm Court Foyer**

**8:00 am to 10:45 am**

**PLENARY SESSION**

**Gold Coast Room**

**8:00 am Recap and Announcements**

**Steven Nadel, ACEEE**

**8:15 am Highlights in Venture Capital and New Technology**

Session Coordinator/Moderator: **Greg Kats, Capital-E**

Presenters: **Mike Zimmerman, Building IQ**  
**Riggs Kubiak, Honest Buildings**

Description: VC funded software-based firms are providing powerful new tools to better manage and deeply reduce building, company, and city energy usage. These three firms (Better Workplace, Building IQ, and Honest Buildings) are among the most exciting and cost-effective new generation of energy efficiency solutions.

**9:30 am Next Steps to the Mainstream**

Session Coordinator/Moderator: **Bruce Schlein, Citi**

Presenters: **Granville Martin, JP Morgan Chase**  
**Susan Leeds, NYCEEC**

Description: The market for energy efficiency investments has grown significantly in scope over the past several years. Despite this, we continue to struggle to reach scale. This panel will look forward and discuss critical next steps to tapping the full potential of this market.

**10:45 am to 11:15 am**

**AM BREAK**

**Gold Coast Foyer**

**Session 3A****Drake Room****Enhancing Project Credit with On-Bill Finance and On-Bill Repayment**Session Coordinators: **David Carey**, *Harcourt Brown & Carey* and **Brad Copithorne**, *Environmental Defense Fund*Moderator: **David Carey**, *Harcourt Brown & Carey*Presenters: **Shannon Smith**, *Abundant Power*  
**Brad Copithorne**, *Environmental Defense Fund*  
**James Griffin**, *Hawaii PUC*

Description: Historically, financing for energy efficiency retrofits has been readily available for projects with investment grade hosts. Linking repayment to the utility bill can provide a significant improvement in credit quality. This panel will examine one of the most successful On-Bill Finance programs that Sempra has used to lend ratepayer funding to finance retrofits of small business properties. This year, California and Hawaii are expected to introduce On-Bill Repayment programs that focus on commercial and residential properties. These programs use a private-sector open-source funding model that allows each investor to work with vendors of their choosing to design go-to market strategies that meet the needs of their customers.

**Session 3B****Parkside****International Models and Progress: Lessons Learned from Canada and the U.K.**Session Coordinator/Moderator: **Philippe Dunsky**, *Dunsky Energy Consulting*Presenters: **Steven Fawkes**, *Day 1 Energy (UK)*  
**Claude Lefrancois**, *Canadian Office of Energy Efficiency*  
**Philippe Dunsky**, *Dunsky Energy Consulting*

Description: Innovative financing models like PACE and PAYS are relatively new. To cast a wider net (and gain a wider perspective), this panel will focus in on the early experience of two "sister" countries – Canada and the U.K. – with models nearly identical to those moving forward in the U.S. today. What innovations are they bringing forward that might interest us? What can we learn from their early successes – not to mention the challenges they've faced? This session – focused on residential sector financing – will help participants take a step back and reap the lessons of three countries at once.

**Session 3C****Superior****Highlights from Recent Research in Energy Efficiency Financing**Session Coordinator/Moderator: **Bob Sahadi**, *IMT*Presenters: **Sarah Stellberg**, *IMT*  
**Dr. Nikhil Kaza**, *University of North Carolina at Chapel Hill*

Description: A handful of significant studies have recently been released that validate the increasing role of energy efficiency in financing residential real estate. Dr. Nikhil Kaza will present a paper he co-authored with his colleagues at the University of North Carolina titled "Home Energy Efficiency and Mortgage Risks." Ms. Sarah Stellberg will provide an overview of other studies on consumer demand for new energy-efficient homes, recent trends in energy efficiency within residential remodeling, and price premiums for green labeled homes that were published by the National Association of Home Builders, University of California Berkeley and the Joint Center for Housing Studies.

**The Financial Regulatory Landscape**

Session Coordinator/Moderator: **Philip Henderson**, *Natural Resources Defense Council*

Presenters: **Lewis Dancy**, *Self-Help Credit Union*  
**Jon Levey**, *Green Choice Bank*

Description: Lending is highly regulated, as practiced by mortgage companies, home improvement lenders, commercial lenders, credit bureaus, and more. The federal regulatory structure alone is an alphabet soup -- the TILA, ECOA, FCRA, RESPA, and more. Yet, energy efficiency financing presents compelling opportunities to help homeowners and commercial building owners invest in energy efficiency, as evidenced by the many new entrants -- utility loan programs, on-bill financing, city institutions to participate in financing, new state "Green Banks," and more.

As institutions wade into the world of lending -- both residential and commercial -- it is essential to explore the opportunities and challenges that will arise in the regulatory landscape and the strategies to navigate.

**12:45 pm to 2:00 pm**

**LUNCH**    **Keynote Address: Dan Reicher**, *Center for Energy Policy and Finance, Stanford University*    **Gold Coast Room**

**2:00 pm to 3:30 pm**

**WEDNESDAY CONCURRENT SESSIONS**

**Session 4A****Drake Room****Third-Party Financing Solutions for Large C&I Projects**

Session Coordinator/Moderator: **Bob Hinkle**, *Metrus Energy*

Presenters: **Erik Birkerts**, *Clean Energy Trust*  
**Katrina Managan**, *Institute for Building Efficiency, Johnson Controls*  
**Bob Anderson**, *Green Campus Partners, LLC*

Description: While many building owners and facility managers understand that the cheapest kilowatt-hour is the one *not* consumed, most energy efficiency projects leave a lot of energy savings on the table. Third-party financing solutions can be a better road to energy efficiency. The main third-party financing solutions for large-scale retrofits include: Efficiency Services Agreements (ESA), Property-Assessed Clean Energy (PACE), and Managed Energy Services Agreement (MESA). Managers that consider the various financing options in tandem with or ahead of technical scoping will be able to compose projects that optimize building performance, elongate the useful lives of existing equipment, even-out building-related investment requirements, and maximize energy savings.



**Building the Business Case for Utilities**Session Coordinator/Moderator: **Peter Krajsa**, *AFC First Financial*Presenters: **Mark Hamann**, *ComEd*  
**Matthew Brown**, *Harcourt Brown & Carey*  
**John Augustino**, *Honeywell Utility Solutions*

Description: Affordability is a key concern of many homeowners when it comes to installing high efficiency and other energy-saving improvements. Rebates only have real value if the homeowner has the ability to pay for the post-rebate balance of the job. As the price of energy efficiency improvement increases, more and more consumers are looking for simple financing plans that can be offset by energy savings. Utilities can play a major role in this process whether through On-Bill programs or marketing support of existing programs. Qualifying improvements and program design must respond to the market rather than trying to dictate to it. This session will showcase examples of what has worked and what hasn't when it comes to utility involvement in residential energy efficiency financing.

**Session 4C****Superior****Risk Mitigation for Energy Efficiency Savings and Financing**Session Coordinator/Moderator: **Chrissa Pagitsas**, *Fannie Mae Multifamily*Presenters: **Peter Adamczyk**, *VEIC*  
**Angela Ferrante**, *Energi Insurance Services, Inc.*  
**Matt Golden**, *Efficiency.org*  
**Bill Beres**, *Johnson Controls, Inc.*

Description: As the saying goes, "Beauty is in the eye of the beholder," and so is risk in the eyes of those guaranteeing, underwriting, and financing energy efficiency savings. This session will explore the many definitions of risk associated with backing energy efficiency savings from underwriting risk to investor risk to default risk. The takeaways will focus on how to better assess the risk associated with your energy efficiency project and how to mitigate it through program and financial product design and stakeholder engagement.

**Session 4D****Georgian****Identifying Opportunities for Financing Multi-Tenant Projects**Session Coordinator/Moderator: **Casey Bell**, *ACEEE*Presenters: **Stephanie Sienkowski**, *ACEEE*  
**Wendy Fok**, *NRDC*  
**Dan Bailey**, *Sieben Energy Associates*  
**Andrew Geer**, *Enterprise Community Partners (Invited)*

Description: This session will focus on barriers to energy efficiency investment in commercial leased space as well as large commercially-owned multifamily subsectors. We will look at how split-incentives, lease lengths, limited debt capacity, and competing investment priorities limit investment in energy efficiency, and explore innovative approaches to identifying high-potential investment opportunities and timing.

**3:30 pm to 3:45 pm****PM BREAK****Gold Coast Foyer**

**Session 5A****Drake Room****Informational Tools for Driving Retrofits**Session Coordinator/Moderator: **Jessica Feingold**, *Environmental Defense Fund*

Presenters: **Elena Alschuler**, *U.S. Department of Energy (Buildings Performance Database)*  
**Craig Isakow**, *WegoWise*  
**Jeffrey Perlman**, *Bright Power*

Description: This session will discuss how information, analytics, and technology can help us make smart, data-driven decisions about energy. Benchmarking and consumption data is critical to understanding the potential value of retrofits and enhancing building energy performance.

**Session 5B****Parkside****Combating Split Incentives in the Multifamily Market**Session Coordinator/Moderator: **Anne McKibbin**, *CNT Energy*

Presenters: **Paul Cummings**, *Enterprise Community Partners*  
**Chrissa Pagitsas**, *Fannie Mae*  
**Tara Siegel**, *California Housing Partnership*

Description: Energy efficiency programs have historically had difficulty serving the multifamily housing market because of split incentives between tenants who pay utility bills and building owners who are responsible for the appliances and building shell measures that, if upgraded, could reduce energy use. This panel discussion will highlight successful financing strategies for overcoming this barrier to energy efficiency upgrades in the multifamily sector.

**Session 5C****Superior****CDFI Innovations in Financing Energy Efficiency Retrofits**Session Coordinator/Moderator: **Amy Brusiloff**, *Bank of America*

Presenters: **Adam Zimmerman**, *Craft3*  
**Kim Latimer-Nelligan**, *LIIIF*  
**Jack Markowski**, *Community Investment Corporation*

Description: Although energy efficiency retrofits of affordable housing and community facilities can significantly lower operating costs and provide other benefits, volume continues to lag, largely due to complexities in financing and the lack of empirical evidence quantifying potential savings. Panelists from CDFIs (Community Development Financial Institutions) will present examples of innovative financing models that overcome these barriers. This session will explore various financing structures and the details of how these programs are being implemented.

CONFERENCE FUNDERS

Gold Sponsors:

**nationalgrid**



**Northeast  
Utilities**



Silver Sponsor:



Bronze Sponsors:



***Thank you for your participation in this year's  
7<sup>th</sup> Annual ACEEE Energy Efficiency Finance Forum.***

***Please fill out an evaluation survey found in your Forum packet or  
online at <https://www.surveymonkey.com/s/2013financeforum>.***