Better Buildings Alliance Market Solutions Team Meeting

May 7, 2014
1:00 – 2:15 PM
2:30 – 3:45 PM

Speakers:
Andrew Schulte, ICF International
Deb Cloutier, JDM Associates
Patrick Finch, Waypoint Building Group
Marta Milan, Waypoint Building Group
Agenda

- Welcome & Introductions
- Activity Updates
  - Leasing & Split Incentive
  - Financing & Appraisal/Valuation
  - Workforce Development/Building Re-Tuning
  - Data Access
  - Better Buildings Webinar Series
- Facilitated Discussion
- Adjourn
Overview

- The goal of the Market Solutions Teams is to help Better Buildings Alliance members identify barriers to energy efficiency and to develop resources for overcoming non-technical barriers to deploying energy efficiency in their building stock, quickly and at scale.

- Current Focus Areas
  - Leasing & Split Incentive
  - Financing / Appraisal and Valuation
  - Building Re-Tuning
  - Data Access
Green Leasing and Split Incentive

Deb Cloutier, JDM Associates
Green Lease Leaders

- Addressing the split incentive
- Set a standard for green leasing
- Expedite adoption of energy-aligned lease clauses
- Recognize success
- Transition to in standard lease form
- Application available year-round

www.greenleaseleader.com
2014 Green Lease Leaders

- 14 Companies…
  …who own or manage over **400 million** square feet

- National Retailers
  - KIMCO Realty
  - Regency Centers

- Flagship Buildings
  - Empire State Realty Trust
  - Bullitt Foundation
2014 Green Lease Leaders
Discoveries

- Many organizations don’t know where to start.

- Those with green leasing best practices don’t talk about them.

- Tenant demand is critical to success. When tenants demand green provisions in a lease, landlords and brokers more willingly offer them.
Driving Adoption of Green Leasing

Better Buildings Alliance is developing new tools:

- Fact sheets
- Best practices for Green Leasing
- Sample building rules & regulations
- Talking points describing the benefits of green leasing for engaging attorneys/counsel
- Pilot a new tenant sector of BBA
  - Engage and exert influence
For More Information

- **Putting Green Leasing into Practice**
- Thursday, May 8, 11:15 AM – 12:30 PM
- Room: Columbia 3
- Presenters
  - Adam Sledd, Institute for Market Transformation
  - Will Teichman, Kimco Realty Corporation
  - Sally Wilson, Newmark Grubb Knight Frank
Topics for Further Discussion

- Driving tenant demand
- Broker education and engagement
- Broker selection and asset manager engagement
- Advisory services
Financing and Appraisal

Patrick Finch, Waypoint Building Group
BBA Finance and Appraisal Efforts

- Development of the Commercial Building Energy Asset Score Program
- Research review of green labels’ impacts on building financial performance
- Coordination with the Appraisal Foundation: review of draft guidance on core competencies for appraisers to value green buildings
DOE is Developing the Commercial Building Energy Asset Score Program

- Includes a web-based tool to evaluate energy efficiency characteristics of buildings
- Generates Energy Asset Scores that are nationally comparable and control for differences in building operations
- Scoring system can help to inform real estate transactions by providing comparable transparent information on building energy performance
- Find more information at the Asset Score website: [http://energy.gov/eere/buildings/commercial-building-energy-asset-score](http://energy.gov/eere/buildings/commercial-building-energy-asset-score)
BBA Finance Efforts to Understand Value of Green Buildings on Financial Performance

- Review of Green Labeling and Building Financial Performance
  - DOE summarized existing market evidence on the impact of green labels and energy efficiency and on building financial performance.
  - Reviewed over 50 studies that demonstrate the connection between green labeled buildings and improved net operating income and asset value. Presents ranges of typical premiums associated with green labeled buildings.
  - Webinar to present findings will be held on May 21st. Register now at https://attendee.gotowebinar.com/register/6967183330352158465
  - The review is now posted on the BBA website: http://www4.eere.energy.gov/alliance/activities/market-solutions-teams/appraisals-valuation/green-labels
The Appraisal Foundation (TAF) has asked for feedback on its draft guidance document from commercial and residential BBA members.

- The Appraisal Practices Board of TAF has been developing guidance to assist real estate and appraisal professionals in building the competency and tools necessary to capture the value of green buildings.

- This document highlights the core skill sets and data necessary for appraisers to value green homes and commercial buildings properly, and provides guidance on how to obtain them.

- Webinar to review the draft guidance document will be held on May 14th. Register now at https://attendee.gotowebinar.com/register/7418581232068890369.
For More Information

- **Getting Traction in Market Transactions: A Conversation with the Appraisal, Brokerage, and Financial Communities**
- Thursday, May 8, 3:30 – 5:00 PM
- Room: Fairchild
- Presenters
  - Theddi Wright-Chappell, Sustainable Values, Inc.
  - David Pogue, CBRE
  - Donna Varner, Multifamily Green Initiative at Fannie Mae
Topics for Further Discussion

Asset Score:
- Is incorporation of building system info into an “energy score” helpful in your decision-making processes?
- Under what conditions would you consider testing out DOE’s asset score system?

Finance:
- What aspects of building financial value are most critical to your work? (e.g., Occupancy, Cap Rates, O&M costs)
- Where would you like to see additional research?

Appraisal:
- How much of an impact does potential impact on property value have on your investment decisions when it comes to efficiency?
- Have you had any success in getting efficiency measures incorporated into a building appraisal in the past?
Workforce Development: Building Re-Tuning

Marta Milan, Waypoint Building Group
Framework for a Better Buildings Workforce

<table>
<thead>
<tr>
<th>Technical Standards</th>
<th>Skills Standards</th>
<th>Curricula &amp; Training</th>
<th>Industry-Recognized Certifications</th>
<th>Third-Party Accreditation</th>
<th>Driving Market Demand</th>
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<tbody>
<tr>
<td>Standards, codes, and specifications defining safe, durable, high-quality work</td>
<td>Define the job tasks and the knowledge, skills and abilities workers need to perform them well</td>
<td>Built on clear learning objectives and aligned with technical and skills standards</td>
<td>National, industry &amp; government recognized certifications built on common blueprints when appropriate</td>
<td>Evaluation of program quality and alignment with industry-recognized content</td>
<td>Policy mechanisms and recognition of accredited workforce credentialing programs</td>
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</table>
Re-tuning is a low-cost process to identify and correct building operational problems that lead to energy waste. To expand the practice of re-tuning, the Department of Energy (DOE), with support from the Pacific Northwest National Laboratory (PNNL), developed training curricula focused on re-tuning both large (with a building automation system, or BAS) and small (without a BAS) commercial buildings.

DOE is utilizing a train-the-trainer approach to deliver the building re-tuning curricula, engaging its Better Buildings Alliance partners as well as setting up training centers in association with the National Institute of Science and Technology Manufacturing Extension Partnership (NIST MEP).
DOE Re-Tuning Collaboration with NIST MEPS BCTEP – Future Trainings

Funded by DOE in collaboration with NIST Manufacturing Extension Partnership (MEP), the Building Construction Technology Extension Program (BCTEP) pilot engages three MEP centers across the country to deliver re-tuning training using the extension program model, which has been tested and proven in the agricultural and manufacturing sectors. Each MEP center employed the core re-training material provided by DOE/PNNL and developed additional modules focused on the specific needs of their local market.

<table>
<thead>
<tr>
<th>NIST MEP</th>
<th>Location</th>
<th>Partners</th>
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<tbody>
<tr>
<td>Manex</td>
<td>San Francisco</td>
<td>The Corporation for Manufacturing Excellence in California, partnering with Laney College and the International Union of Operating Engineers Local 39</td>
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<td>DVIRC</td>
<td>Philadelphia</td>
<td>Delaware Valley Industrial Resource Center in Pennsylvania, partnering with Pennsylvania State University and Pennsylvania College of Technology</td>
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<tr>
<td>NY DED</td>
<td>NYC &amp; Albany</td>
<td>New York State Department of Economic Development in New York, partnering with City University of New York and Rochester Institute of Technology</td>
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## Re-Tuning Resources are Available Online

<table>
<thead>
<tr>
<th>Re-Tuning Resources on CBRD</th>
<th>Online Re-Tuning Training Available</th>
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<tbody>
<tr>
<td>Visit the Commercial Buildings Resource Database (CBRD) for free Re-Tuning Resources (<a href="https://buildingdata.energy.gov/cbrd/">https://buildingdata.energy.gov/cbrd/</a>)</td>
<td>PNNL is offering two free interactive Re-Tuning e-learning courses to anyone interested in improving a building's energy performance and the comfort of the building's occupants (<a href="http://retuningtraining.labworks.org/training/lms/">http://retuningtraining.labworks.org/training/lms/</a>)</td>
</tr>
<tr>
<td>- Small Commercial Building Re-Tuning Primer</td>
<td>- Re-tuning for Building with Building Automation Systems (CEUs available from the Building Operator Certification Program)</td>
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<tr>
<td>- Large Building Re-Tuning Training</td>
<td>- Re-tuning for Buildings without Building Automation Systems</td>
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<td>- Pre-Re-Tuning Trend Data</td>
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<td>- ECAM BAS Data Analysis</td>
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<tr>
<td>- Vornado Re-Tuning 3-month Case Study</td>
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<tr>
<td>- Coming soon: Additional case study examples from re-tuning training participants</td>
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For More Information

- **Commercial Building Re-Tuning: No- to Low-Cost Measures to Significantly Reduce Energy Consumption**
- Thursday, May 8, 9:45 – 11:00 AM
- Room: Jay
- Presenters
  - Susan Corry, University of Maryland – College Park
  - Don Haas, Brandywine Realty Trust
  - John Healy, Aramark Tower
  - Scott Mitchell, BNY Mellon Bank Center
Topics for Further Discussion

- How often does your staff “re-tune” your building? Are they aware of the operational energy efficiency opportunities?
- What is the best way to bring the re-tuning knowledge to the broader commercial building market audience?
Data Access

Andrew Schulte, ICF International
Resources

- Philadelphia Case Study
- Prologis Implementation Model
- The Data Access and Transparency Alliance (DATA)
- Energy Data Accelerator Website
Better Buildings Energy Data Accelerator

Utilities and local governments partnering with DOE to commit to providing whole-building data to commercial building owners interested in benchmarking.

- Accelerator Partners will:
  - Demonstrate low-cost, standardized approaches for providing energy data for the purpose of whole building energy performance benchmarking.
  - Develop best practice approaches for reliable and secure utility aggregation of energy data from multiple accounts to facilitate whole-building benchmarking while protecting privacy and
  - Demonstrate new tools to streamline the transfer of utility bill data to benchmarking tools, including standard data formats for ENERGY STAR® Portfolio Manager.

- Opportunity for building owners and operators to communicate their data access needs to representatives of local jurisdictions and serving utilities
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<tr>
<th>Local Governments</th>
<th>Utilities</th>
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<tr>
<td>City of Atlanta, GA</td>
<td>Atlanta Gas Light Company</td>
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<td>City of Austin, TX</td>
<td>Austin Energy</td>
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<tr>
<td>Cities of Boston and Cambridge, MA</td>
<td>NSTAR/Northeast Utilities</td>
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<td>City of Chicago, IL</td>
<td>Commonwealth Edison</td>
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<td>City of Columbus, OH</td>
<td>AEP Ohio</td>
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<tr>
<td>District of Columbia</td>
<td>PEPCO Holdings, Inc.</td>
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<tr>
<td>City of Houston, TX</td>
<td>Reliant (an NRG Company)</td>
</tr>
<tr>
<td>City of Kansas City, MO</td>
<td>Kansas City Power &amp; Light Company</td>
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<tr>
<td>City of Los Angeles, CA</td>
<td>Los Angeles Department of Water and Power</td>
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<td>Southern California Gas Company</td>
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<tr>
<td>City of Minneapolis, MN</td>
<td>Xcel Energy Inc.</td>
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<td>City of New York, NY</td>
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<tr>
<td>City of Philadelphia, PA</td>
<td>National Grid</td>
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<td></td>
<td>PECO Energy Company</td>
</tr>
<tr>
<td>Cities of San Diego and Chula Vista, CA</td>
<td>San Diego Gas &amp; Electric Company</td>
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<tr>
<td>City of Salt Lake City, UT</td>
<td>Rocky Mountain Power</td>
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<tr>
<td>City of San Francisco, CA</td>
<td>Pacific Gas &amp; Electric Company</td>
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<tr>
<td>City of Santa Monica, CA</td>
<td>Southern California Edison</td>
</tr>
<tr>
<td>City of Seattle, WA</td>
<td>Puget Sound Energy</td>
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For More Information

- **Energy Data Access: Helping Building Owners Obtain Whole-Building Energy Data to Drive Performance Assessment and Improvements**
- Thursday, May 8, 1:30 – 3:00 PM
- Room: Columbia 1-2
- Presenters
  - Nicole Ballinger, City of Seattle
  - Andrew Burr, Institute for Market Transformation
  - Will Teichman, Kimco Realty Corporation
Topics for Further Discussion

- How best to facilitate engagement of BBA members in the Accelerator stakeholder engagement processes?
- What if a city where you operate is not included in the list of Accelerator participants?
- What do you need, as building owners/operators, in order to most effectively articulate and communicate the importance of whole-building data access?
- What are your thoughts regarding the sensitivity of aggregated, whole-building energy consumption data (with respect to tenant privacy)?
Better Buildings Webinar Series

Almost 3,000 attendees across 9 sessions!

- **August:** Commercial Buildings Data Access: A Success Story
- **September:** Tying Energy Efficiency to Compensation and Performance Reviews
- **October:** Speaking the CFO Language: Building the Case for EE with Financial Decision Makers
- **November:** Fight Amongst Yourselves: Intra-Organization Energy Efficiency Competitions
- **December:** Deep Energy Retrofits
- **January:** Kick-Starting Your Energy Management Program
- **February:** Real-Time Energy Management
- **March:** Adding Solar to Your Building Portfolio
- **April:** Engaging Building Occupants to Reduce Energy Use
Topics for Further Discussion

- What subjects would you like to see covered in future webinars?
- Have you been able to implement – or consider implementing – any of the strategies presented by webinar panelists?
Facilitated Discussion
Discussion Topics

- [See activity-specific discussion questions]
- What other non-technical barriers to energy efficiency should be considered for engagement via the Market Solutions team?
- What are the preferred mechanisms for keeping this group up-to-date and informed of activities?
  - Emails via listserv
  - Conference calls
  - Webinars
  - In-person meetings
| DOE Program Leads | Kristen Taddonio  
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| | Marta Milan  
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