



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

Innovators creating sustainable landlord-tenant relationships

Green Lease Leaders Coverage



ENERGY MANAGER TODAY



2014 Green Lease Leaders

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

- National Retailers



- Flagship Buildings



2014 Green Lease Leaders

OXFORD

 KIMCO[™]
REALTY

Regency[®]
Centers.

EMPIRE STATE
REALTY TRUST


pwc

Bullitt Foundation


UNICO[®]

Akridge
Real Estate at the Highest Grade[™]

 THE TOWER COMPANIES
Transcend.

LIBERTY
PROPERTY TRUST


JAMESTOWN


BrandywineRealtyTrust

KILROY
REALTY
CORPORATION



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

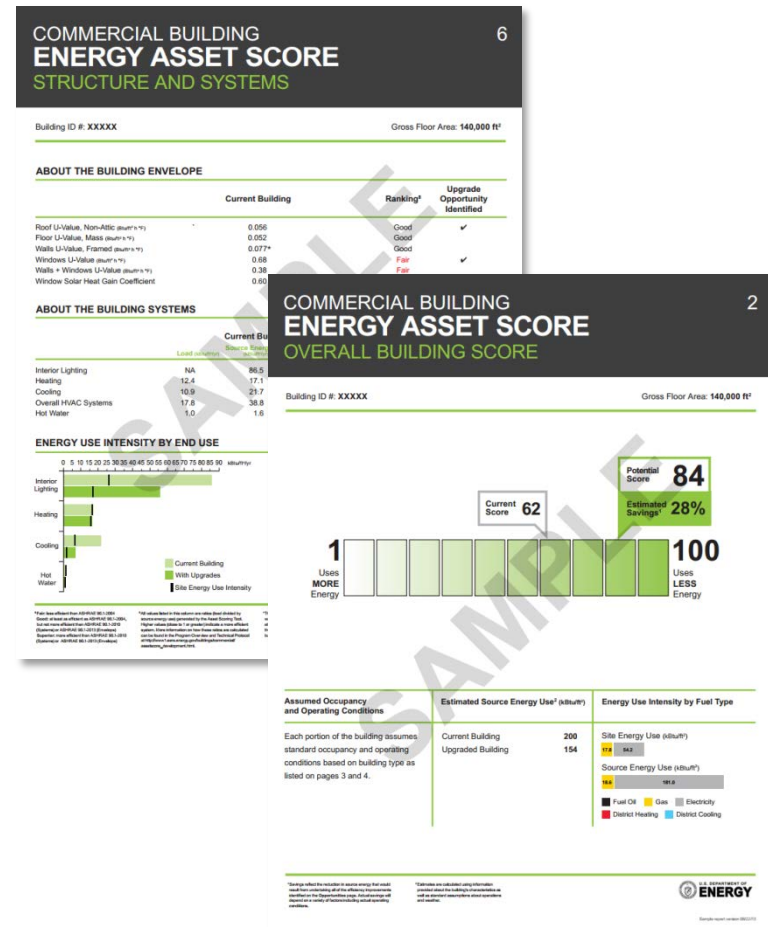
BBA Finance and Appraisal Efforts

- 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

BBA Finance Efforts to Build Foundational Data to Evaluate Energy Efficient 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>



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>

Current State of Research

There is an increasing body of evidence demonstrating green labels' impacts on some areas of financial performance, while others need more research

Greater Evidence (More than 7 studies)	Preliminary Evidence (7 or fewer studies)	Mixed Evidence
<ul style="list-style-type: none">• Rental Rates• Occupancy Rates• Utility Expenses• Sales Price• Construction	<ul style="list-style-type: none">• Tenant Quality• Occupant Health, Comfort and Productivity• Capitalization Rates	<ul style="list-style-type: none">• Total Operating Expenses

Greater Evidence: Occupancy Rates are higher in green-labeled buildings

Occupancy Rate: The percentage of rentable space in a building that is currently leased and occupied by a tenant

Key Findings:

- One 2010 study found that LEED buildings have 16-18% higher occupancy than a non-rated building, while ENERGY STAR buildings have 10-11% higher occupancy.⁵⁰
 - Green Design and the Market for Commercial Office Space (2010): examined CoStar class A office data across 46 markets (7,308 properties) in the U.S.⁵⁰
- Another 2010 study of 286 LEED office buildings and 1,045 ENERGY STAR office buildings in 45 U.S. markets found an occupancy rate premium of 11% for both LEED and ENERGY STAR.⁵¹
- A 2008 study of 292 LEED and 1,261 ENERGY STAR buildings across the nation found occupancy rates:
 - 12 additional studies concentrated in CA
 - Some but not building size.

Better Buildings
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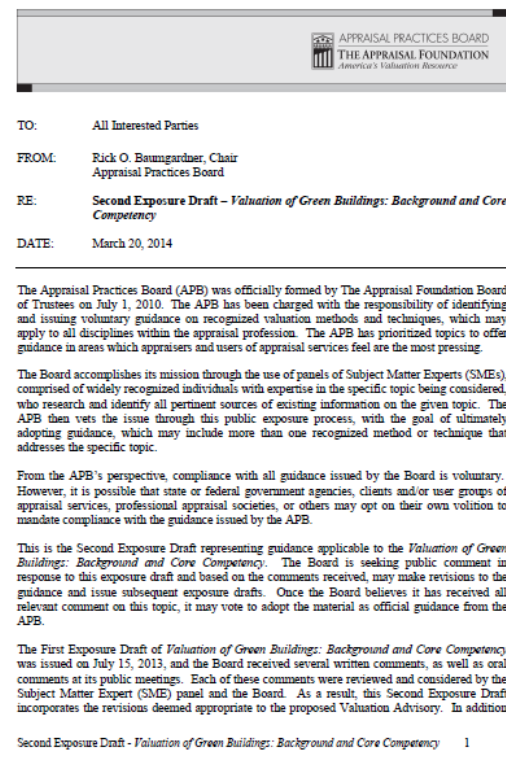
ENERGY EFFICIENCY & FINANCIAL PERFORMANCE:
A Review of Studies in the Market
March 2014

Waypoint U.S. DEPARTMENT OF ENERGY

BBA Review Requested on Core Competencies for Appraisers to Value Green Buildings

- 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>

Valuation of Green Buildings: Background and Core Competency



APPRaisal PRACTICES BOARD
THE APPRAISAL FOUNDATION
America's Valuation Resource

TO: All Interested Parties

FROM: Rick O. Baumgardner, Chair
Appraisal Practices Board

RE: **Second Exposure Draft – Valuation of Green Buildings: Background and Core Competency**

DATE: March 20, 2014

The Appraisal Practices Board (APB) was officially formed by The Appraisal Foundation Board of Trustees on July 1, 2010. The APB has been charged with the responsibility of identifying and issuing voluntary guidance on recognized valuation methods and techniques, which may apply to all disciplines within the appraisal profession. The APB has prioritized topics to offer guidance in areas which appraisers and users of appraisal services feel are the most pressing.

The Board accomplishes its mission through the use of panels of Subject Matter Experts (SMEs), comprised of widely recognized individuals with expertise in the specific topic being considered, who research and identify all pertinent sources of existing information on the given topic. The APB then vets the issue through this public exposure process, with the goal of ultimately adopting guidance, which may include more than one recognized method or technique that addresses the specific topic.

From the APB's perspective, compliance with all guidance issued by the Board is voluntary. However, it is possible that state or federal government agencies, clients and/or user groups of appraisal services, professional appraisal societies, or others may opt on their own volition to mandate compliance with the guidance issued by the APB.

This is the Second Exposure Draft representing guidance applicable to the *Valuation of Green Buildings: Background and Core Competency*. The Board is seeking public comment in response to this exposure draft and based on the comments received, may make revisions to the guidance and issue subsequent exposure drafts. Once the Board believes it has received all relevant comment on this topic, it may vote to adopt the material as official guidance from the APB.

The First Exposure Draft of *Valuation of Green Buildings: Background and Core Competency* was issued on July 15, 2013, and the Board received several written comments, as well as oral comments at its public meetings. Each of these comments were reviewed and considered by the Subject Matter Expert (SME) panel and the Board. As a result, this Second Exposure Draft incorporates the revisions deemed appropriate to the proposed Valuation Advisory. In addition

Second Exposure Draft - *Valuation of Green Buildings: Background and Core Competency* 1

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?

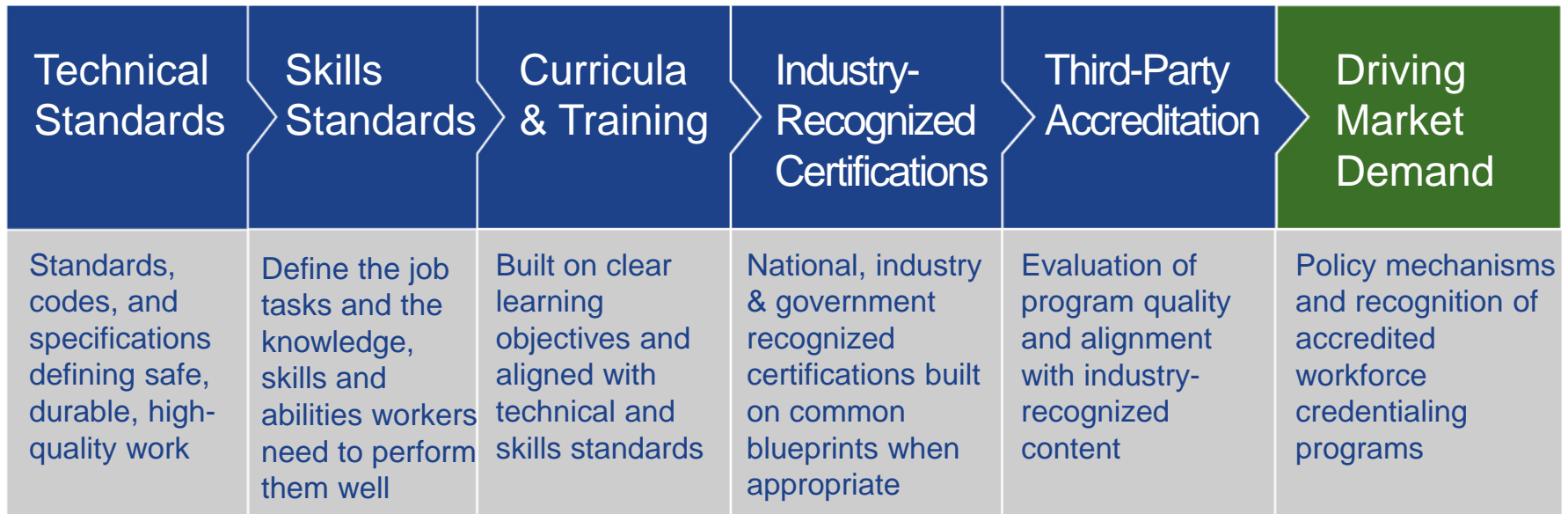
Appraisal:

- 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



Re-Tuning Offers Curricula and Training for Commercial Building Operational Professionals



- 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.

NIST MEP	Location	Partners
Manex	San Francisco	The Corporation for Manufacturing Excellence in California, partnering with Laney College and the International Union of Operating Engineers Local 39
DVIRC	Philadelphia	Delaware Valley Industrial Resource Center in Pennsylvania, partnering with Pennsylvania State University and Pennsylvania College of Technology
NY DED	NYC & Albany	New York State Department of Economic Development in New York, partnering with City University of New York and Rochester Institute of Technology

Re-Tuning Resources are Available Online

Re-Tuning Resources on CBRD

Visit the Commercial Buildings Resource Database (CBRD) for free Re-Tuning Resources (<https://buildingdata.energy.gov/cbrd/>)

- Small Commercial Building Re-Tuning Primer
- Large Building Re-Tuning Training
- Pre-Re-Tuning Trend Data
- ECAM BAS Data Analysis
- Vornado Re-Tuning 3-month Case Study
- Coming soon: Additional case study examples from re-tuning training participants

Online Re-Tuning Training Available

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 (<http://retuningtraining.labworks.org/training/lms/>)

- Re-tuning for Building with Building Automation Systems (CEUs available from the Building Operator Certification Program)
- Re-tuning for Buildings without Building Automation Systems

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

Energy Data Accelerator Partner Pairs

Local Governments	Utilities
City of Atlanta, GA	Atlanta Gas Light Company
City of Austin, TX	Austin Energy
Cities of Boston and Cambridge, MA	NSTAR/Northeast Utilities
City of Chicago, IL	Commonwealth Edison
City of Columbus, OH	AEP Ohio
District of Columbia	PEPCO Holdings, Inc.
City of Houston, TX	Reliant (an NRG Company)
City of Kansas City, MO	Kansas City Power & Light Company
City of Los Angeles, CA	Los Angeles Department of Water and Power Southern California Gas Company
City of Minneapolis, MN	Xcel Energy Inc.
City of New York, NY	National Grid
City of Philadelphia, PA	PECO Energy Company
Cities of San Diego and Chula Vista, CA	San Diego Gas & Electric Company
City of Salt Lake City, UT	Rocky Mountain Power
City of San Francisco, CA	Pacific Gas & Electric Company
City of Santa Monica, CA	Southern California Edison
City of Seattle, WA	Puget Sound Energy

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

Andrew Schulte, ICF International

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

Have Questions? Contact Us

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	Financing	Data Access
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	Building Re-Tuning and Workforce Development	
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