### AGENDA AT-A-GLANCE
#### MONDAY, MAY 9, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM – 12:30 PM</td>
<td>REGISTRATION AND SHOWCASE PROJECT TOURS</td>
</tr>
<tr>
<td>12:30 – 1:45 PM</td>
<td>OPENING REMARKS AND NETWORKING LUNCH**</td>
</tr>
<tr>
<td>1:45 – 2:00 PM</td>
<td>BREAK</td>
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<tr>
<td><strong>2:00 – 3:15 PM</strong></td>
<td>COMMERCIAL</td>
</tr>
<tr>
<td></td>
<td>5 concurrent sessions; choose 1</td>
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<tr>
<td></td>
<td><strong>PUBLIC</strong></td>
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<tr>
<td></td>
<td>2 concurrent sessions; choose 1</td>
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<tr>
<td>2:00 – 3:15 PM</td>
<td>Commercial Real Estate Break-out</td>
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<tr>
<td></td>
<td>Room: Columbia 2</td>
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<td></td>
<td>Healthcare Break-out</td>
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<td></td>
<td>Room: Holmead East</td>
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<td></td>
<td>Higher Education Break-out</td>
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<td></td>
<td>Room: Jay</td>
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<td></td>
<td>Hospitality Break-out</td>
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<td>Room: Holmead West</td>
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<td></td>
<td>Retail, Food Service, and Grocery Break-out</td>
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<td>Room: Columbia 9</td>
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<tr>
<td>3:15 – 3:45 PM</td>
<td>BREAK</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td><strong>MORNING SECTOR SESSIONS</strong></td>
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<td></td>
<td>1 session</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td><strong>PUBLIC</strong></td>
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<tr>
<td></td>
<td>4 concurrent sessions; choose 1</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td>Cleanup on Energy Savings on Aisle 7!</td>
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<td></td>
<td>Saving Energy in Supermarket Design and</td>
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<td></td>
<td>Operation Room: Northwest</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td>Leading Technical Solutions for Energy</td>
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<tr>
<td></td>
<td>Systems: Expert-led Seminars Covering Steam,</td>
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<td>Pumps, Process Heating and Compressed Air</td>
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<td></td>
<td>Room: Columbia 5</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td>Invest to Improve Energy Efficiency</td>
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<td></td>
<td>Considerations for Investment Owners</td>
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<td>Room: Columbia 2</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td>Is the Second Time a Charm?</td>
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<td>Higher Education Success Stories with ESPCs</td>
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<td>Room: Holmead East</td>
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<tr>
<td>3:45 – 5:00 PM</td>
<td>It’s a Solar Panel!</td>
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<td>Tenants and Owners Working Together to Get</td>
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<td>Solar on the Roof, Reduce Energy Costs</td>
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<td>Room: Holmead West</td>
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<td>3:45 – 5:00 PM</td>
<td>Optimizing Air Exchange Rates in Hospitals:</td>
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<td></td>
<td>Best Practices and New ASHRAE Guidance</td>
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<td></td>
<td>Room: Holmead West</td>
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<tr>
<td></td>
<td><strong>AFTERNOON SECTOR SESSIONS AND PARTNER PAVILION</strong></td>
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<tr>
<td></td>
<td><strong>COMMERCIAL</strong></td>
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<td>1 session</td>
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<td></td>
<td>K-12 School District Peer Exchange</td>
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<td></td>
<td>Room: Oak Lawn</td>
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<tr>
<td></td>
<td>Local Government Meet-Up Part 2</td>
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<td></td>
<td>Room: Columbia 8</td>
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<td></td>
<td>Partner Meeting Outdoor Lighting Accelerator</td>
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<td></td>
<td>Room: Jay</td>
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<td>Getting the State Conversation Started</td>
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<td>4:00 – 6:00 PM</td>
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<td>Room: Columbia 4</td>
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<td></td>
<td><strong>INDUSTRIAL</strong></td>
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<td>1 session</td>
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<tr>
<td></td>
<td>Better Plants Discussions: Key Trends and</td>
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<td></td>
<td>Future Directions in Industrial Energy</td>
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<td></td>
<td>Efficiency Room: Columbia 5</td>
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<td></td>
<td>Advancing K-12 Energy Efficiency Strategies</td>
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<td></td>
<td>Room: Oak Lawn</td>
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<td></td>
<td><strong>MULTIFAMILY</strong></td>
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<td>1 session</td>
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<tr>
<td></td>
<td>Workshop: Welcome, National Goal, and Federal</td>
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<td>Policy Room: Columbia 7</td>
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<td><strong>BREAK</strong></td>
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<td>1 session</td>
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<td></td>
<td>Workshop: Portfolio-Wide Planning and Passive</td>
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<td>House Properties Room: Columbia 7</td>
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<td><strong>BREAK</strong></td>
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<td>1 session</td>
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<td></td>
<td>Workshop: Meet Your Account Manager Room:</td>
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<tr>
<td></td>
<td>Columbia 6</td>
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<td></td>
<td><strong>OPENING REMARKS AND NETWORKING LUNCH</strong></td>
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<td>1 session</td>
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<td></td>
<td>Workshop: Department of Housing and Urban</td>
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<td>Development (HUD) Public Housing - Policy</td>
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<td>in the Weeds Room: Columbia 7</td>
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<td><strong>BREAK</strong></td>
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<td>1 session</td>
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<td></td>
<td>Workshop: Department of Housing and Urban</td>
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<td></td>
<td>Development (HUD) Insured and Assisted Housing - Utility Tracking and Benchmarking Roundtable</td>
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<td>Room: Columbia 6</td>
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<td></td>
<td><strong>BREAK</strong></td>
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<td>1 session</td>
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<td>Room: Columbia 6</td>
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<td></td>
<td><strong>NOTES</strong></td>
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<tr>
<td></td>
<td>Additional Speed Dating with Financial Allies sessions are available in room Piscataway</td>
</tr>
<tr>
<td></td>
<td>Partner Pavilion open 9:30 AM – 5:00 PM</td>
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<tr>
<td></td>
<td>Commercial — Affiliate Lunch: Leveraging DOE Resources for Your Membership in room Northwest</td>
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<tr>
<td></td>
<td>Commercial — SEED Collaborative Roundtable Lunch in room Morgan</td>
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<tr>
<td></td>
<td>Industrial — Better Plants Technology Transfer Lunch in room Columbia 5</td>
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<tr>
<td></td>
<td>Multifamily — Partner Lunch in room Columbia 6</td>
</tr>
</tbody>
</table>

* Additional Speed Dating with Financial Allies sessions are available in room Piscataway
** Commercial — Affiliate Lunch: Leveraging DOE Resources for Your Membership in room Northwest
Commercial — SEED Collaborative Roundtable Lunch in room Morgan
Industrial — Better Plants Technology Transfer Lunch in room Columbia 5
Multifamily — Partner Lunch in room Columbia 6
**AGENDA AT-A-GLANCE**
**TUESDAY, MAY 10, 2016**

### SECTOR & CROSS-CUTTING SESSIONS

#### REGISTRATION AND CONTINENTAL BREAKFAST
**KEYNOTE ADDRESS AND WELCOME**

#### BREAK

**MORNING SECTOR SESSIONS AND PARTNER PAVILION**

<table>
<thead>
<tr>
<th>COMMERCIAL</th>
<th>DATA CENTER</th>
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</thead>
<tbody>
<tr>
<td><strong>9:45 – 11:00 AM</strong></td>
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</tr>
<tr>
<td>4 concurrent sessions; choose 1</td>
<td>1 session</td>
</tr>
<tr>
<td>Healthy Funding: Green Revolving Funds for Healthcare Room: Columbia 9</td>
<td>From Challenge to Opportunity: Cost Effective Energy Efficiency Solutions in Data Centers Room: Kalorama</td>
</tr>
<tr>
<td>Saving Energy in Labs: The Chief Campus Consumer Room: Holmead East</td>
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</tr>
<tr>
<td>Refrigeration Systems: How Smart is Yours? Room: Jay</td>
<td></td>
</tr>
</tbody>
</table>

#### BREAK

**11:00 – 11:15 AM**

**11:15 AM – 12:30 PM**

<table>
<thead>
<tr>
<th>PARTNER KEYNOTE, RECOGNITION, AND PANEL DISCUSSION</th>
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</thead>
<tbody>
<tr>
<td><strong>2:00 – 3:15 PM</strong></td>
</tr>
<tr>
<td>4 concurrent sessions; choose 1</td>
</tr>
<tr>
<td>Benchmarking to Bricks: Turning Data into Action Room: Columbia 8</td>
</tr>
<tr>
<td>From Numbers to Action: Using EMS to Detect Problems and Fix Them Room: Morgan</td>
</tr>
<tr>
<td>Growing Grants - Part 1: Efficient, Effective Use of Federal Funding While Minimizing Environmental Impacts Room: Kalorama</td>
</tr>
</tbody>
</table>

#### SAVE THE DATE

**3:15 – 3:45 PM**

| 2 concurrent sessions; choose 1 |          |
| Accelerating Access to Energy Data: How Utilities are Helping Building Owners Room: Columbia 9 |          |
| Approaching Green: Show Me the Usual Room: Columbia 8 |          |
| Combined Heat and Power (CHP): Meet Up Room: Holmead West |          |
| To Finance or Not to Finance: Pros and Cons of Third-Party Financing for Energy Efficiency Room: Jay |          |
| Growing Grants - Part 2: Efficient, Effective Use of Federal Funding While Minimizing Environmental Impacts Room: Kalorama |          |
| The Future of Commercial PACE Room: Columbia 4 |          |
| Green Banks 101: How They Work and How to Make Them Work for You Room: Columbia 2 |          |

#### NETWORKING EVENT

**5:00 – 7:30 PM**

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*Additional Speed Dating with Financial Allies sessions are available in room Piscataway Chp Accelerator Partner Meeting open 9:30 AM - 5:30 PM

*CHP Accelerator Partner Meeting, 9:45 AM - 12:30 PM in room Holmead West (invite only)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Registration and Continental Breakfast</td>
</tr>
<tr>
<td>9:30</td>
<td>Keynote Address and Panel Discussion</td>
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<tr>
<td>10:00</td>
<td>Morning Sector Sessions and Partner Pavilion*</td>
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<tr>
<td>10:45</td>
<td>Concurrent sessions; choose 1</td>
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<tr>
<td>11:00</td>
<td>Break</td>
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<tr>
<td>11:15</td>
<td>Concurrent sessions; choose 1</td>
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<tr>
<td>11:30</td>
<td>Keynote Address and Panel Discussion</td>
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<tr>
<td>12:00</td>
<td>Lunch</td>
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<td>1:00</td>
<td>Afternoon Cross-Cutting Sessions*</td>
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<td>2:00</td>
<td>Data-Driven Decision Making</td>
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<td>2:30</td>
<td>Financing and Partnerships</td>
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<tr>
<td>3:00</td>
<td>Break</td>
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<tr>
<td>4:00</td>
<td>Concurrent sessions; choose 1</td>
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</tbody>
</table>

*Additional speed dating with Financial Allies sessions are available in room Piscataway Partner Pavilion open 9:30 AM - 1:30 PM
WHAT’S HAPPENING IN THE PARTNER PAVILION

**MONDAY:** 9:30 AM - 5:00 PM  **TUESDAY:** 9:30 AM - 5:30 PM  **WEDNESDAY:** 9:30 AM - 1:30 PM

**ROOM:** International Ballroom / Concourse Foyer

ASK-AN-EXPERT
HVAC, lighting, refrigeration renewables, and financing

WATCH
Better Buildings Challenge SWAP webisodes screenings & Showcase Tours

EFFICIENCY ELEVATOR PITCH
Goal achievers, make your efficiency elevator pitch (and be filmed doing it)

LIVE REPORTING
Tweeting and blogging interviews

NETWORK
Meet partners and learn a thing or two

Learn more at betterbuildingsinitiative.energy.gov/summit
## MEET THE COMMERCIAL EXPERTS

<table>
<thead>
<tr>
<th>LIGHTING &amp; ELECTRICAL</th>
<th>LIGHTING &amp; ELECTRICAL</th>
<th>RENEWABLES</th>
<th>REFRIGERATION</th>
<th>ENERGY MANAGEMENT INFORMATION SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Sandahl</td>
<td>Felipe Leon</td>
<td>Jay Paidipati</td>
<td>Robert Zogg</td>
<td>Jessica Granderson</td>
</tr>
<tr>
<td>Pacific Northwest National Laboratory</td>
<td>Pacific Northwest National Laboratory</td>
<td>Navigant Consulting</td>
<td>Navigant Consulting</td>
<td>Lawrence Berkeley National Laboratory</td>
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<tr>
<td>TUE: 9:30 - 10:30 AM</td>
<td>TUE: 9:30 - 10:30 AM</td>
<td>TUE: 11:30 AM - 12:30 PM</td>
<td>TUE: 1:30 - 2:30 PM</td>
<td>TUE: 4:30 - 5:30 PM</td>
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<td>WED: 10:30 - 11:30 AM</td>
<td>WED: 10:30 - 11:30 AM</td>
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## PLUG & PROCESS LOADS

<table>
<thead>
<tr>
<th>SPACE CONDITIONING</th>
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<tbody>
<tr>
<td>Rois Langner</td>
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<tr>
<td>National Renewable Energy Laboratory</td>
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<tr>
<td>TUE: 2:30 - 3:30 PM</td>
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<tr>
<td>WED: 12:30 - 1:30 PM</td>
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## MEET THE INDUSTRIAL EXPERTS

<table>
<thead>
<tr>
<th>PROCESS HEATING</th>
<th>PUMPING SYSTEMS</th>
<th>ENERGY MANAGEMENT &amp; WATER EFFICIENCY</th>
<th>COMPRESSED AIR &amp; INDUSTRIAL ASSESSMENTS</th>
<th>STEAM &amp; DATA ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sachin Nimbalkar</td>
<td>Daryl Cox</td>
<td>Prakash Rao</td>
<td>Michael Muller</td>
<td>Thomas Wenning</td>
</tr>
<tr>
<td>Oak Ridge National Laboratory</td>
<td>Oak Ridge National Laboratory</td>
<td>Lawrence Berkeley National Laboratory</td>
<td>Rutgers University</td>
<td>Oak Ridge National Laboratory</td>
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<tr>
<td>TUE: 3:30 - 4:30 PM</td>
<td>WED: 11:30 AM - 12:30 PM</td>
<td>TUE: 1:30 - 2:30 PM</td>
<td>TUE: 2:30 - 3:30 PM</td>
<td>WED: 12:30 - 1:30 PM</td>
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</tbody>
</table>
Showcase Building Tours  
See pages 12-13 for details  
RESERVATION ONLY  
Varies (8:00 AM - 12:00 PM)

Special Events  
Opening Remarks and Lunch  
12:30 - 1:45 PM  
Room: International Ballroom  
Dr. Kathleen Hogan  
Deputy Assistant Secretary for Energy Efficiency, DOE

Partner Pavilion  
See page 8 and 9 for details  
9:30 AM - 5:30 PM

Networking Lunches  
See page 16 for details

Commercial Sector – Affiliate Roundtable: Leveraging Resources for Your Membership  
12:30 - 1:45 PM

Commercial Sector – SEED Collaborative Roundtable Lunch  
12:30 - 1:45 PM

Industrial Sector – Better Plants Technology Transfer Lunch  
12:30 - 1:45 PM

Speed Dating with Financial Allies  
See page 16 for details  
All day, scheduled in advance

Multifamily Workshops  
Welcome, National Goal, and Federal Policy  
9:00 - 9:45 AM  
See page 15 for details

Portfolio-Wide Planning and Passive House Properties  
10:00 - 11:15 AM  
See page 15 for details

Meet Your Account Manager  
11:30 AM - 12:30 PM  
See page 15 for details

HUD Public Housing – Policy in the Weeds  
2:00 - 3:15 PM  
See page 19 for details

HUD Insured and Assisted Housing – Utility Tracking and Benchmarking Roundtable  
2:00 - 3:15 PM  
See page 23 for details

HUD Insured and Assisted Housing – Policy in the Weeds  
3:45 - 5:00 PM  
See page 23 for details

HUD Public Housing – Utility Tracking and Benchmarking Roundtable  
3:45 - 5:00 PM  
See page 23 for details

Industrial Workshop  
3:45 - 5:45 PM  
See page 22 for details

All day, scheduled in advance

Special Events  
Special Events  
Plenary Address and Partner Insider Talks  
8:30 - 9:30 AM  
Room: International Ballroom

Partner Address and Recognition Lunch  
12:30 - 1:45 PM  
Room: International Ballroom  
Dr. David Friedman  
Principal Assistant Secretary for Energy Efficiency and Renewable Energy, DOE

Kasim Reed  
Mayor of the City of Atlanta

Networking Event  
5:00 - 7:30 PM  
Room: Heights Courtyard

Partner Pavilion & Ask-An-Expert  
See page 8 and 9 for details  
9:30 AM - 5:30 PM

Part 1: Energy Efficiency Finance  
9:45 - 11:00 AM  
See page 27 for details

Part 2: Energy Efficiency Finance  
11:15 AM - 12:30 PM  
See page 32 for details

Speed Dating with Financial Allies  
See page 22 for details  
All day, scheduled in advance
WEDNESDAY

Special Events

Keynote Address and Panel Discussion
8:30 - 9:30 AM
Room: International Ballroom

Secretary Ernest Moniz
U.S. Department of Energy

Secretary Julián Castro
U.S. Department of Housing and Urban Development

Partner Pavilion & Ask-An-Expert
See page 8 and 9 for details
9:30 AM - 1:30 PM

Speed Dating with Financial Allies
See page 42 for details
All day, scheduled in advance

Public Workshop

Part 1: Analyze This – Using Data to Improve Strategic Energy Plans
9:45 - 11:00 AM
See page 44 for details

Part 2: Analyze This – Using Data to Improve Strategic Energy Plans
11:15 AM - 12:30 PM
See page 48 for details

Commercial Workshop

Part 1: Energy to Finance: Understanding the CFO and Translating Metrics
9:45 - 11:00 AM
See page 43 for details

Part 2: Energy to Finance: Understanding the CFO and Translating Metrics
11:15 AM - 12:30 PM
See page 46 for details

JOIN AND FOLLOW THE DISCUSSION

@BetterBldgsDOE
#BBSummit2016
SHOWCASE BUILDING TOURS

Thank you to the Better Buildings Challenge Partners and local properties participating in the Showcase Building Tours. We appreciate you highlighting energy and water efficiency measures that have helped you achieve 20% or greater savings. Keep up the good work!

COMMERCIAL BUILDINGS

The Millennium Building
THE TOWER COMPANIES

The Willard InterContinental
INTERCONTINENTAL HOTELS GROUP

Science and Engineering Building
THE GEORGE WASHINGTON UNIVERSITY

17th Street Branch and Office
PNC FINANCIAL SERVICES GROUP

National Cancer Institute
THE JBG COMPANIES

PUBLIC BUILDINGS

Arlington Central Library
ARLINGTON COUNTY, VA

Hotel Monaco
DISTRICT OF COLUMBIA

Equipment Maintenance and Transit Operations Center
MONTGOMERY COUNTY, MD

The U.S. Capitol Building
ARCHITECT OF THE CAPITOL

Learn more at betterbuildingsinitiative.energy.gov/summit
COMMERCIAL BUILDINGS
The Tower Companies, The Millennium Building*
COMMERCIAL REAL ESTATE
Better Buildings Challenge partner, The Tower Companies, has committed to reduce energy and water use by at least 20% by 2020 and has already saved 20% in energy and over $200,000 annually in this 240,000 square foot commercial office building. The tour will include details about lighting upgrades, building management system and HVAC controls, the photovoltaic system, and dialogue with the building team and solar installer.

InterContinental Hotels Group (IGH), The Willard InterContinental
HOSPITALITY
The “Responsible Business in Hospitality Heart of the House Tour” at this historic, landmark hotel will feature IHG’s Green Engage system, a proprietary, sustainability management system that offers 200+ “Green Solutions” recently endorsed by LEED. Trials of the Green Engage system show potential energy savings of up to 25%. As a Better Buildings Challenge partner, IHG has a goal to realize 20% energy savings by 2020.

The George Washington University, Science and Engineering Building
HIGHER EDUCATION
This LEED Gold certified, 375,000 square foot building houses the School of Engineering and Applied Science and the Columbian College of Arts and Sciences’ physical science departments, including Biological Sciences, Physics, Chemistry, and Hominid Paleobiology. The tour will include special building features such as green roofs, green walls, chilled beams, daylighting, and reclaimed stormwater for use in plumbing fixtures.

PNC Financial Services Group, 17th Street Branch and Office
RETAIL
As a Better Buildings Challenge partner, PNC is targeting a 30% energy reduction in 3,200 properties and has already achieved 5%. This tour will highlight sustainable features of the bank branch and office including efficient lighting, HVAC, water fixtures, a climate wall, a typical office floor, and green roof. The building’s core and shell and interiors for the bank branch and office spaces are LEED Platinum certified.

The JBG Companies, National Cancer Institute*
HEALTHCARE
As a Better Buildings Challenge Partner, JBG has reduced energy use by 57% and saved $2 million at the 580,000 square foot National Cancer Institute through lighting, efficient chillers and enhanced equipment controls. The tour will include the LEEP Award winning parking garage lighting system, a living wall, green roof, lighting and shading systems, stormwater retention pond, data centers, generators, and more.

PUBLIC BUILDINGS
Arlington County, VA, Arlington Central Library*
Through its partnership with the Better Buildings Challenge, Arlington County’s Central Library has reduced energy use by 28% since 2008, saving $56,000 annually, and has cut electricity consumption in half since 2000. The tour will highlight projects completed in the 137,000 square foot building, including lighting retrofits, energy efficient chiller replacement, and the installation of a photovoltaic system.

District of Columbia, Hotel Monaco*
The historic Hotel Monaco achieved annual energy savings of 28%, water savings of 41%, and cost savings of $485,000, while complying with GSA, NAFTA, and historic preservation regulations. The tour of the 196,800 square foot building will include energy and water saving measures in guestrooms, back-of-the-house and public spaces featured by Better Buildings Challenge partner, the District of Columbia. The building is owned by the District of Columbia and the hotel is managed by Kimpton Hotels, an InterContinental Hotels Group (IHG) brand.

Montgomery County, MD
Equipment Maintenance and Transit Operations Center
Tour county facility buildings to see energy and water conservation measures in action, including rainwater harvesting, energy efficient lighting and controls, a PV solar system, advanced controls and sub-metering, advanced elevator technologies, green cleaning and noise reduction measures.

The U.S. Capitol Building
The Architect of the Capitol’s has reduced energy consumption by 31% over the last 10 years across its 17.4m square feet of facilities, historic buildings and grounds; investing $90 million in upgrades with $80m in savings. This tour will focus on the U.S. Capitol Building and explain how the integration of modern technologies in historic buildings achieves extraordinary results.

*Better Buildings Challenge Showcase Projects are featured in the Better Buildings Solution Center
GET STARTED ON YOUR ENERGY EFFICIENCY SOLUTION TODAY

BETTER BUILDINGS SOLUTION CENTER

The Solution Center is designed to help your organization find a solution by topic, building type, solution type, building size, sector, technology, location, and more. Learn how a variety of organizations finance their building solutions, implement emerging technologies, build their team’s energy expertise, motivate staff, get buy-in from management, or establish community-wide initiatives. Explore the hundreds of solutions tested and proven by partners.

Find Energy Solutions

Filter By:

BARRIER
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PARTNER
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SECTOR
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CONTENT TYPE
--Choose--

TECHNOLOGY
--Choose--

betterbuildingssolutioncenter.energy.gov

Learn more at betterbuildingsinitiative.energy.gov/summit
MONDAY: 9:00 AM – 12:30 PM

MULTIFAMILY

Workshop:
Welcome, National Goal, and Federal Policy
9:00 - 9:45 AM

Workshop:
Portfolio-Wide Planning and Passive House Properties
10:00 - 11:15 AM

Workshop:
Meet Your Account Manager
11:30 AM - 12:30 PM

ROOM  Columbia 7
LEVEL  Terrace
Gather around with all of your fellow multifamily partners as we kick off the Better Buildings Summit! Officials from the U.S. Department of Housing and Urban Development will provide updates on national sustainability goals and related federal policy. We’ll also take time to highlight some of the most innovative work by multifamily partners during the past year.

ROOM  Columbia 7
LEVEL  Terrace
Sit back and enjoy a moment of inspiration, as we hear about the success of the New York City Housing Authority in developing its audacious, portfolio-wide sustainability plan for the largest individual affordable housing portfolio in the country. Stay tuned to hear from Philadelphia-based firm, Onion Flats, about their success in building and promoting the ambitious Passive House standard for LIHTC properties.

ROOM  Columbia 6
LEVEL  Terrace
Take this opportunity to meet with your Better Buildings Challenge Account Managers. Toni, Blakely, and David will be providing information pertinent to all BBC Multifamily Partners and taking questions during this time.

PANELISTS
Representative, U.S. Department of Housing and Urban Development

PANELISTS
Bomee Jung, New York City Housing Authority
Tim McDonald, Onion Flats

PANELISTS
Toni Gallo, ICF International
Blakely Jarrett, ICF International
David Ruggiero, ICF International

Moderator
Julia Hustwit, HUD
MONDAY: NETWORKING LUNCHES AND SPEED DATING MEETINGS

COMMERCIAL

Affiliate Lunch: Leveraging DOE Resources for Your Membership  
12:30 - 1:45 PM

ROO M  Northwest  
LEVEL  Lobby

Session for affiliate members only. Meet your fellow Better Buildings Alliance affiliate members. Learn from affiliates collaborating with the Better Buildings Initiative to provide real value to their memberships. Learn from DOE partnerships and communications staff about best practices for making the most of the affiliate relationship and brainstorm new ideas for collaboration in the future.

SEED Collaborative Round-Table  
12:30 - 1:45 PM

ROO M  Morgan  
LEVEL  Lobby

SEED Collaborative Partners are welcome to a networking lunch to discuss project successes, challenges, and opportunities with the DOE SEED Team. An agenda will be distributed in advance of the Summit with room for additional topics based on Partner interest.

Better Plants Technology Transfer Lunch  
12:30 - 1:45 PM

ROO M  Columbia 5  
LEVEL  Terrace

Join technical experts from DOE’s Advanced Manufacturing Office to discuss new technologies, materials and innovations that will impact energy use and productivity in manufacturing. Attendees can look forward to lunchtime conversations covering issues such as: combined heat and power; additive manufacturing; smart manufacturing; water-energy impacts; and more.

FINANCIAL ALLIES

Speed Dating  
Scheduled in advance

ROO M  Piscataway  
LEVEL  Lobby

Interested attendees will be matched with Financial Allies for 15-minute “speed dating” sessions to learn about financial offerings for their building portfolios. Attendees will complete a short questionnaire in advance of the Summit to identify specific financing questions and needs. There are nearly 30 Allies providing a wide range of financing solutions, including PACE, ESPCs, insurance, bonds, and more, for all building types.

COMMERCIAL PANELISTS

John Bernhards, APPA: Leadership in Educational Facilities
Erin Hiatt, Retail Industry Leaders Association
Scott Wood, Environmental Defense Fund

COMMERCIAL MODERATOR

Harry Bergmann, DOE

INDUSTRIAL PANELISTS

COMMERCIAL MODERATOR

Harry Bergmann, DOE

INDUSTRIAL MODERATOR

Joe Indvik, JDM Associates
Holt Mountcastle, JDM Associates

PANELISTS

John Bernhards, APPA: Leadership in Educational Facilities
Erin Hiatt, Retail Industry Leaders Association
Scott Wood, Environmental Defense Fund

Moderator
Holly Carr, DOE
ROOM Columbia 2
LEVEL Terrace
Meet and engage with Better Buildings Challenge and Alliance leaders from across the commercial real estate sector as they provide sector and activities updates for the commercial real estate sector and facilitate an “Around the Room: Sector trends and What’s Next” conversation. Partners will share insights on their experiences in the field and encourage discussion on issues such as building valuation, evaluating skilled workforce, broker engagement, and more.

ROOM Holmead East
LEVEL Lobby
Meet and engage with Better Buildings Challenge and Alliance leaders from across the healthcare sector. This interactive session will be an opportunity for partners to connect and converse with peers, sharing accomplishments and challenges in a candid format. Attendees will participate in open discussions on topics such as funding energy projects and integrating solar PV in healthcare.

ROOM Jay
LEVEL Lobby
Meet and engage with Better Buildings Challenge and Alliance leaders from across the higher education sector. This interactive session will be an opportunity for partners to connect and converse with peers, sharing accomplishments and challenges in a candid format. Featured partner presentations and discussions will include engaging occupants in energy efficiency and augmenting energy projects with student staffing.

ROOM Holmead West
LEVEL Lobby
Meet and engage with Better Buildings Challenge and Alliance leaders from across the hospitality sector. This interactive session will be an opportunity for partners to connect and converse with peers, sharing accomplishments and challenges in a candid format. Attendees will participate in open discussions on topics such as funding energy projects, water efficiency, and communications opportunities like the Better Buildings Challenge SWAP.

ROOM Columbia 9
LEVEL Terrace
Meet and engage with Better Buildings Challenge and Alliance leaders from the retail, food service and grocery sectors. This session will feature brief updates on the Better Buildings program and sector activities. Participants will also engage with their peers to hear about several successfully implemented projects, as well as their future goals for energy efficiency.

MODERATORS
Cindy Zhu, DOE
Jake Dowling, JDM Associates
MODERATOR
Jason Hartke, DOE
MODERATOR
Harry Bergmann, DOE
MODERATOR
Andy Mitchell, DOE
MODERATOR
Holly Carr, DOE
Better Plants Discussion: Key Trends and Future Directions in Industrial Energy Efficiency

DOE’s Advanced Manufacturing Office Director, Mark Johnson, will engage in a dialogue with ACEEE’s Senior Director for Research, Neal Elliott, on market trends impacting manufacturers, their energy future, and productivity. Key topics covered will include: the energy price picture; IT advancements and their impact on manufacturers; and energy efficiency’s role in helping U.S. manufacturers remain competitive. Partners will have the opportunity to pose questions to the panelists.

Local Government Meet-Up: Part 1

Engage with leaders from the local government sector. These interactive sessions will be an opportunity for attendees to connect and exchange best practices with peers, sharing accomplishments and challenges in a candid format. Discussions will be about the expanding role of local governments in areas of energy and sustainability and will be facilitated by national experts on U.S. action that supports and complements the COP 21 climate meetings in Paris.

Advancing K-12 Energy Efficiency Strategies

Energy is an expense schools can reduce to free up educational resources. Energy efficient schools also establish a safe, healthy, and productive environment for learning. Panelists share strategies to advance energy efficiency in school districts through program and policy actions. Topics will include plug load reduction, energy savings performance contracting, developing a skilled workforce, and zero energy schools.

PANELISTS
Neal Elliott, ACEEE
Mark Johnson, DOE

MODERATOR
Sarah Zaleski, DOE

MODERATOR
Crystal McDonald, DOE

ROOM Columbia 5
LEVEL Terrace

ROOM Columbia 8
LEVEL Terrace

ROOM Oak Lawn
LEVEL Lobby

Moderator
Jay Wrobel, DOE
MONDAY: 2:00 – 3:15 PM

**MULTIFAMILY**

**Workshop:**
Department of Housing and Urban Development (HUD)
Public Housing - Policy in the Weeds

**Room:** Columbia 7
**Level:** Terrace

Hear from staff from HUD’s Office of Public Housing about the intricacies of recent sustainability policies. Take the opportunity to ask all of your detailed compliance questions.

**Panelists**
Chris Golden, HUD

**Moderator**
Crystal Bergemann, HUD

**Room:** Columbia 6
**Level:** Terrace

At this roundtable discussion, we bring together multifamily building owners receiving HUD insurance and/or assistance, software companies, non-profit organizations, utility providers, and HUD policymakers to discuss the future of utility benchmarking in affordable housing.

**Panelists**
Lauryn Alleva, HUD
Kate Nzive, HUD

**Moderator**
Julia Hustwit, HUD
Supermarkets are one of the most energy intensive commercial building types of any industry. Join us in this session to learn about best practices for designing new stores, maximizing efficiency in refrigeration and other building systems, and organizational approaches to saving energy. In addition to case examples, topics will also include leveraging the ASHRAE Advanced Energy Design Guide for Grocery Stores.

Many business models rely on a franchise model that can make energy projects challenging because of split-incentives. This issue has proven to be particularly prevalent in the hospitality and food service sectors. Panelists will share the clever ways they have sweetened the deal for all parties to address this challenge. More than just theory, attendees will learn about real-world solutions they can adopt.

New technologies and industry trends have recently led to an abundance of data related to the sustainability and energy performance of commercial buildings. These developments have enabled the real estate community to conduct new analysis and develop new methods of understanding and demonstrating the benefits of high performance properties. This panel will discuss how investment owners can increase energy efficiency and communicate sustainability successes to achieve a competitive advantage.

**PANELISTS**

**Cleaning up on Energy Savings on Aisle 7! Saving Energy in Supermarket Design and Operation**

- Aaron Daly, Whole Foods Market
- Richard Heath, Southeastern Grocers
- Mick Schwedler, ASHRAE

**ROOM** Northwest
**LEVEL** Lobby

**How Can Brands Partner with Owners on Efficiency?**

- Scott Moline, The Wendy’s Company
- Laura Troise, HEI Hotels & Resorts

**ROOM** Kalorama
**LEVEL** Lobby

**Invest to Impress! Energy Efficiency Considerations for Investment Owners**

- Nick Stolatis, TIAA
- Brenna Walraven, Corporate Sustainability Strategies
- Dan Winters, GRESB

**ROOM** Columbia 2
**LEVEL** Terrace

**Moderator**

- Holly Carr, DOE
- Andy Mitchell, DOE
- Deb Cloutier, JDM Associates
Several higher education partners are having great success engaging with ESPCs for serious energy savings. Come hear how both state universities and community colleges have made these contracts work to their greatest advantage. Panelists will discuss the various iterations of ESPCs on their campuses, which have covered projects ranging from lighting and controls to HVAC systems and retrocommissioning.

ROOM Holmead East
LEVEL Lobby

Learn about the Better Buildings resources that partners have contributed and learn more about their proven strategies to install solar. Regency Centers will present its implementation strategy of creating a system where they own solar panels and sell energy to tenants at below market cost, creating higher revenue and providing value to tenants. Kilroy Realty will also share their innovative approach to the challenging split-incentive that plagues solar on leased-buildings.

ROOM Columbia 9
LEVEL Terrace

Healthcare building air exchange rate requirements vary based on space and use, providing the opportunity to optimize air exchange rates to meet code requirements while avoiding unnecessary air changes. Learn how to increase energy efficiency while maintaining health and comfort; how to successfully navigate the current ASHRAE guidance; and get a sneak peek into the future of air changes based on Standard 170.

ROOM Holmead West
LEVEL Lobby

PANELISTS

Susan Corry, University of Maryland, College Park
Billie Hardin, Kentucky Community and Technical College System
Steve Kolb, Towson University

Sara Neff, Kilroy Realty Corporation
Andy Perrin, TJ Maxx
Mark Peternell, Regency Centers

Kenneth Hansen, University of Nebraska Medical Center
Jim Prince, Ascension Health
Chris Rousseau, Newcomb & Boyd

Moderator
Susan Corry, University of Maryland, College Park
Jay Paidipati, Navigant Consulting
Michael Deru, National Renewable Energy Laboratory
In this session, K-12 district partners work with DOE and their peers to review energy action plans, leverage peer expertise, and receive timely feedback. Resources and tools available to K-12 school districts will be presented to advance building energy efficiency goals, develop renewable energy technology applications, design STEM education, and drive workforce development.

**PANELISTS**

Jensen Adams, Kansas City Public Schools  
Rois Langner, National Renewable Energy Laboratory  
Abdul Majid, Anne Arundel County Public Schools  
Cody Taylor, DOE  
Moderator  
Bruce Lung, DOE

**ROOM** Columbia 5  
**LEVEL** Terrace

**PANELISTS**

Daryl Cox, Oak Ridge National Laboratory  
Michael Muller, Sr., Rutgers University  
Sachin Nimbalkar, Oak Ridge National Laboratory  
Tom Wenning, Oak Ridge National Laboratory  
Moderator  
Bruce Lung, DOE

**ROOM** Columbia 8  
**LEVEL** Terrace

Engage with leaders from the local government sector. These interactive sessions will be an opportunity for attendees to connect and exchange best practices with peers, sharing accomplishments and challenges in a candid format. Discussions will be about the expanding role of local governments in areas of energy and sustainability and will be facilitated by national experts on U.S. action that supports and complements the COP 21 Climate meetings in Paris.

**PANELISTS**

Antonia Graham, City of Huntington Beach, CA  
George Sfnarolakis, State of Rhode Island  
Rick Bunch, Southeast Michigan Regional Energy Office  
Moderator  
Bruce Kinzey, Pacific Northwest National Laboratory

**ROOM** Jay  
**LEVEL** Lobby
We heard you! And you want to hear from each other! By popular demand, come join your fellow states and learn about their Lead by Example (LBE) efforts and experiences. Let’s start this valuable discussion: Come ready to volunteer a two-minute “LBE verbal highlight reel” of your state’s past year. In the second half of the meeting, help plan an online network where states can “continue the conversation.”

**Getting the State Conversation Started**

*INVITE ONLY*

**3:45 - 5:45 PM**

**ROOM** Columbia 4  
**LEVEL** Terrace

**PANELISTS**
- Lauryn Alleva, HUD
- Bob Iber, HUD
- Mark Kudlowitz, HUD
- Kate Nzive, HUD
- Ted Toon, HUD

**PANELISTS**
- Michael Freedberg, HUD

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**Workshop:**  
Department of Housing and Urban Development (HUD)  
Insured and Assisted Housing - Policy in the Weeds

**ROOM** Columbia 7  
**LEVEL** Terrace

Hear from staff from HUD’s Office of Multifamily Housing about the intricacies of recent sustainability policies. Take the opportunity to ask all of your detailed compliance questions.

**Workshop:**  
Department of Housing and Urban Development (HUD)  
Public Housing - Utility Tracking and Benchmarking Roundtable

**ROOM** Columbia 6  
**LEVEL** Terrace

At this roundtable discussion, we bring together public housing authorities receiving HUD assistance, software companies, non-profit organizations, utility providers, and HUD policymakers to discuss the future of utility benchmarking in affordable housing.
ROOM Piscataway
LEVEL Lobby
Interested attendees will be matched with Financial Allies for 15-minute “speed dating” sessions to learn about financial offerings for their building portfolios. Attendees will complete a short questionnaire in advance of the Summit to identify specific financing questions and needs. There are nearly 30 Allies providing a wide range of financing solutions, including PACE, ESPCs, insurance, bonds, and more, for all building types.

ROOM Heights Courtyard
LEVEL Lobby
All attendees are invited to a networking event. Light refreshments will be served.

ROOM Columbia 9
LEVEL Terrace
Healthcare systems often work on small profit margins with limited ability to make large energy efficiency investments. Green revolving funds can help address this need. Learn best practices from healthcare organizations who have successfully used green revolving funds to spur energy and water efficiency investments in their healthcare systems, and learn how to receive support in the development of your own self-managed fund.

ROOM Holmead East
LEVEL Lobby
This session will describe a comprehensive training program for laboratory operations and maintenance personnel, a North American Laboratory Freezer Challenge, and the results of a study on laboratory plug loads. Organized by the International Institute for Sustainable Laboratories (I2SL), this session will provide information for enduring energy efficiency and environmental sustainability in laboratories.

MODERATOR
Joe Indvik,
JDM Associates
Holt Mountcastle,
JDM Associates

PANELISTS
Camille Grippon, Bon Secours Health Systems
Mark Orlowski, Sustainable Endowments Institute
Jon Utech, Cleveland Clinic Foundation

PANELISTS
Allison Paradise, My Green Lab
Kathy Ramirez-Aguilar, University of Colorado-Boulder
Tom Smith, Exposure Control Technologies

Moderator
Holly Carr, DOE

Moderator
Phil Wirdzek, International Institute for Sustainable Laboratories
**TUESDAY: 9:45 – 11:00 AM**

**COMMERCIAL**

**Refrigeration Systems: How Smart is Yours?**

ROOM  Jay  LEVEL  Lobby

Are you interested in making refrigeration simpler, cheaper, and more reliable? In this session, panelists will describe how display-case controllers can help lower costs for installation, start up, energy, and maintenance, all while improving food quality and safety. Come learn whether display-case controllers are right for your food retail business.

**Underwriting Energy: Are Commercial Mortgages Ignoring Energy-Related Risks and Benefits?**

ROOM  Columbia 10  LEVEL  Terrace

Come hear about the banks’ perspective on mortgage underwriting and risk valuation, the role of energy consumption and energy using assets, and property condition reports. This session presents findings from a scoping study addressing energy factors in commercial mortgages. Panelists will present a set of proposed interventions to properly address energy factors in commercial mortgages and an action plan to implement them.

**DATA CENTER**

**From Challenge to Opportunity: Cost Effective Energy Efficiency Solutions in Data Centers**

ROOM  Kalorama  LEVEL  Lobby

This panel session will highlight recent success stories from Better Buildings data center partners from the national laboratory and co-location facility sectors. These solutions will focus on cost effective projects that bring real savings without unwieldy complexity.

**PANELISTS**

**COMMERCIAL**

Peter Dee, Danfoss
John Wallace, Emerson Climate Technologies

**PANELISTS**

Kelly Krhounek, Fannie Mae
Bruce Schlein, Citi
Nancy Wallace, University of California-Berkeley

**PANELISTS**

Steve Hammond, National Renewable Energy Laboratory
Cindy Martin, Los Alamos National Lab
John Sasser, Sabey Data Centers
Monica Witt, Los Alamos National Laboratory

**Moderator**

Bob Zogg, Navigant Consulting

Jason Hartke, DOE

Will Lintner, DOE
A key part of the Better Buildings Challenge and, increasingly, local utility benchmarking laws, is utility consumption tracking and benchmarking. Learn how the Chicago Housing Authority tackled the tracking by hosting a local Data Jam event and how to use utility benchmarks to develop strategic goals and make investment decisions.

Strategic Energy Management (SEM) is a novel approach for businesses to capture low or no cost energy savings. Likewise, SEM is a new frontier for utilities in creating longer term partnerships with customers. It is an alternative pathway to achieving energy savings beyond traditional utility product rebate programs. The panel will highlight companies that are aggressively driving SEM across their enterprises or customers.

HVAC may be one of the richest grounds for mining energy savings. Learn from industry experts about implementing innovative heating and cooling projects in industrial facilities. Speakers will share what has worked best for them while evaluating, selecting, and implementing projects to meet corporate goals. This session will focus on successful radiant heating and enthalpy controls projects and the development of building automation systems.

**INDUSTRIAL**

**ROOM** Columbia 4
**LEVEL** Terrace

Strategic Energy Management is Free Money

**ROOM** Columbia 5
**LEVEL** Terrace

Innovative Industrial Projects: Finding Savings in Heating and Cooling Applications

**ROOM** Columbia 7
**LEVEL** Terrace

Planning Tools: Holistic Needs and Opportunities Assessments

**ROOM** Columbia 8
**LEVEL** Terrace

Planning Tools: Utility Data, Management and Benchmarking

**PANELISTS**

**INDUSTRIAL**

Bert Hill, Volvo
Steve Hinkens, Briggs & Stratton
David Sudbeck, General Electric

Greg Baker, Vermont Energy Investment Corporation
Steve Schultz, 3M
Wade Willatt, Schneider Electric

**PANELISTS**

Erin Christensen Ishizaki, Mithun
Tabitha Harrison, Tenderloin Neighborhood Development Corporation

Jon Braman, BrightPower
Ellen Sargent, Chicago Housing Authority

Moderator
Tim Kolp, RJI Associates

Moderator
Paul Scheihing, DOE

Moderator
Julia Hustwit, HUD

Moderator
Crystal Bergemann, HUD
This session will highlight EM&V tools and resources that states can use to support the use of energy efficiency to achieve emission reductions. This session will focus on new and emerging resources, such as standardized reporting forms, energy efficiency registries, regional and statewide approaches to EM&V, evaluator certification, and ESCO related M&V.

PANELISTS
Molly Cripps, Tennessee Department of Environment & Conservation
Arah Schuur, Massachusetts Department of Energy Resources
Rodney Sobin, NASEO

Moderator
Mike Li, DOE

ROOM Columbia 6
LEVEL Terrace

TUESDAY: 9:45 – 11:00 AM

Overcoming Barriers: Deploying High Efficiency Outdoor Lighting

Municipalities are continuously looking for new opportunities to decrease utility bills, improve safety and services, and protect the environment. High-performance outdoor lighting technologies are proving to be a cost-effective energy savings measure. This session will highlight municipalities that have overcome technology, regulatory, and financing barriers to deploy high efficiency outdoor lighting in their communities.

PANELISTS
Elizabeth Compitello, Delaware Valley Regional Planning Commission
Steve Gorcester, Washington State Transportation Improvement Board
Renee Hutcheson, State of North Carolina

Moderator
Crystal McDonald, DOE

ROOM Columbia 2
LEVEL Terrace

PANELISTS
Matthew Brown, Harcourt, Brown and Carey
Jeff Deason, Lawrence Berkeley National Laboratory
Chris Kramer, Clean Energy Works
Greg Leventis, Lawrence Berkeley National Laboratory

Moderator
Eleni Pelican, DOE

ROOM Columbia 3
LEVEL Terrace

The goal of this workshop is to provide participants an interactive experience where they have an opportunity to deepen their understanding of energy efficiency financing but also directly addressing barriers or concerns that they may be experiencing in their own jurisdictions with energy efficiency experts. In part 1 of this, two-part, 2.5 hour working session, participants will engage in a mix of panel discussions, break-out discussions and knowledge-based activities.
The Better Buildings Neighborhood Program featured 41 competitively selected grantees that developed sustainable energy efficiency upgrade programs across the U.S. from 2010 through 2014. Hear what worked and what didn’t, and key success factors identified by an independent evaluation. Hear recent program experiences and a demo of the Better Buildings Residential Program Solution Center, a one-stop shop of lessons learned and resources.

ROOM Morgan
LEVEL Lobby

PANELISTS
Tim Miller, Enhabit
Erick Shambarger, Milwaukee, WI
Brad Smith, Boulder County, CO

Property Assessed Clean Energy (PACE) programs provide affordable and accessible financing for home energy efficiency upgrades that improve value, comfort and durability, and create jobs. PACE is a scalable financing mechanism with over 50,000 projects and $1 billion invested in California, and multifamily housing projects in New York and other states.

ROOM Northwest
LEVEL Lobby

PANELISTS
Cisco DeVries, Renew Financial
Jewel James, Renovate America, Inc
Mark Kelley, Vermont Energy Investment Corporation

Moderator
Jonathan Cohen, DOE
Moderator
Steve Dunn, DOE
Influencing occupant behavior to control plug loads in commercial buildings can be tricky. In this session, hear a few key insights from two Better Buildings Alliance partners who have successfully reduced plug load energy use in their multi-tenant and higher education buildings. Panelists will share methods of using hardware, software, and behavioral messaging to meet their plug load energy reduction goals.

New technologies in the food service sector can offer tremendous, and sometimes overlooked, energy savings. Panelists and attendees will discuss cutting-edge technologies and resources, including, the Better Buildings Alliance’s Demand Control Kitchen Ventilation Guide, EMIS for Food Service Guide, and the commissioning of restaurant HVAC and exhaust systems.

University campuses have seen remarkable growth in square footage over the past few decades. What does this mean for energy efficiency? How can campus-based organizations employ policy tools and space utilization strategies to increase energy efficiency across campuses amidst fluctuations in enrollment? Panelists will discuss the drivers of growth and successful strategies for mitigating it, including shared instrumentation and space optimization software.

Better Buildings Alliance affiliate, Environmental Defense Fund has spent two years focusing on improving energy efficiency among commercial real estate owners and operators in Chicago and New York through its Climate Corps student fellowship program. Hear how EDF is moving the building efficiency needle in the Windy City and Big Apple with accounts from two Better Buildings partners participating in the program.
Most data centers are designed for maximum reliability. IT professionals operating data centers are often reluctant to make efficiency improvements that might impact reliability. This session will explore proven cost effective solutions that increase the energy efficiency of the cooling and power delivered to the IT equipment without compromising reliability.

Natural gas prices have hit near all-time lows but many organizations are being faced with year-over-year electrical rate hikes. To deal with these increases, come learn how industry leaders are driving energy and cost savings through a range of innovative solutions. Panelists will highlight successful technological improvements which reduced electrical consumption within their facilities and provided other benefits.

Facilities certified to Superior Energy Performance (SEP) have demonstrated excellence in energy management and achieved third party verified energy savings. These manufacturing and commercial facilities have also achieved sustained energy performance improvement. This panel will highlight the successes of companies that have implemented SEP across their enterprises with measurable, attractive paybacks.

**PANELISTS**

**DATA CENTER**
- **Most Wanted!**
  - **Energy Efficiency Without Sacrificing Reliability in Data Centers**
  - **David Breland**, Intuit
  - **John Dumler**, Digital Realty
  - **Isaac Negusse**, Iron Mountain

**INDUSTRIAL**
- **Innovative Industrial Projects:**
  - **Successful Approaches to Reducing Electricity Consumption**
  - **Mark Dhennin**, Cummins, Inc.
  - **Chris Goddard**, Nissan North America
  - **Maxime Verstraete**, Hilton Worldwide

**PANELISTS**
- **Moderator**
  - **John Clinger**, ICF International

- **Moderator**
  - **Thomas Wenning**, Oak Ridge National Laboratory

- **Moderator**
  - **Paul Scheihing**, DOE
A car is only as efficient as its driver and its mechanic; so, too, for buildings. In this session, we discuss best practices and review case studies on engaging building residents and training facilities managers to keep buildings running efficiently and meeting Better Buildings Challenge goals. Case studies are presented.

Energy retrofits can harm or help resident health. Beyond preventing harm, we discuss how to use energy retrofits as an opportunity to improve the lives of your building residents and the surrounding community. Hear the different ways that organizations are using energy efficiency to improve their communities through positive health outcomes and job creation.

**PANELISTS**

**Ruth Ann Norton**, Green & Healthy Homes Initiative  
**Erika Symmonds**, GRID Alternatives  
**Michael Levinson**, Group14 Engineering  
**Patti Ziegler**, City of Mankato Economic Development Authority

**Moderator**  
Julia Hustwit, HUD  
Michael Freedberg, HUD
The goal of the workshop is to provide participants an interactive experience where they have an opportunity to deepen their understanding of energy efficiency financing but also directly address barriers or concerns that they may be experiencing in their own jurisdictions with energy efficiency experts. In part 2 of the two part, 2.5 hour working session, participants will continue to hear from experts and participate in an in-depth, interactive, learning experience that will highlight important terminology and explore common barriers to success.

More than 15 state and local governments have adopted benchmarking laws that will collectively impact over 50,000 buildings in the next few years. Speakers will discuss the type of data being collected; data applications in policy and planning; and non-energy efficiency audiences that can benefit from the data, such as housing officials, economic development offices, and public health researchers.

**PANELISTS**

Matthew Brown, Harcourt, Brown and Carey
Jeff Deason, Lawrence Berkeley National Laboratory
Chris Kramer, Energy Futures Group
Greg Leventis, Lawrence Berkeley National Laboratory

**Moderator**

Eleni Pelican, DOE

**PANELISTS**

Rebecca Baker, Seattle, WA
Eric Coffman, Montgomery County, MD
Anne Evens, Elevate Energy

**Moderator**

Andrew Burr, DOE

**PANELISTS**

David Hodgins, Los Angeles Better Buildings Challenge
Dean Laube, State of Iowa
Adrienne Ricehill, Franklin Energy
Theresa Spurling-Wood, Alachua County Public Schools

**Moderator**

Amy Kidd, DOE
The benefits of energy efficiency upgrades beyond money and energy savings include non-energy benefits that are often not communicated well. Multiple non-energy benefits include lower home maintenance costs, improved air quality and less sick days for adults and children, greater resiliency, and lower emissions. Hear examples of how your program can fully realize the potential from all of these multiple non-energy benefits.

PANELISTS

Matt Casey, CRS Data
Jeremy Crawford, Real Estate Standards Organization
Elizabeth Green, rel-e-vant Solutions

Moderator
Chad Curry, National Association of REALTORS®
TUESDAY: 2:00 – 3:15 PM

DATA-DRIVEN DECISION MAKING

Benchmarking to Bricks: Turning Data into Action

From Numbers to Action: Using EMIS to Detect Problems and Fix Them

The Data Surge App Showcase: Harnessing Better Information for Better Buildings

Energy Modeling for Building Owners: The Force Awakens

ROOM Columbia 8
LEVEL Terrace

Energy performance data alone does not guarantee energy savings but by using data to inform decision making, your organization can pinpoint impactful projects and ensure the most savings. This panel brings together a diversity of perspectives to discuss the legislative, technical, financial, and organizational approaches successfully undertaken to move beyond benchmarking building energy use to real project implementation.

ROOM Columbia 9
LEVEL Terrace

Benchmarking policies and programs are increasing the amount of information about buildings’ characteristics and energy performance. In this session, innovative companies will showcase Standard Energy Efficiency Data (SEED) Platform-based apps that harness this data to create new insights and value for policymakers and the real estate community. Attendees will have an opportunity to vote in real time for their favorite apps!

ROOM Holmead East
LEVEL Lobby

Building energy modeling (BEM) is not a traditional ECM as it doesn’t directly save energy. However, by guiding selection and combination of direct ECMS, BEM is actually one of the most cost-effective ECMS, with typical ROIs of a few weeks or mere months! In this session learn about the ROI of BEM, hear testimonials from project managers who use BEM to great effect, and discover resources for engaging with BEM early and often.

ROOM Morgan
LEVEL Lobby

Hear from colleagues who have piloted energy management information systems and piggy back off of their success. Whether considering a new system or already implementing in your organization, join the conversation. Determine what points to monitor, which algorithms give the most bang for the buck, how to bring multiple data points together (lighting, security, parking). Learn how to integrate new software with existing systems, and get a few tips so that the data you capture is actionable.

PANELISTS

Len Hoey, State of North Carolina
Chuck Murray, State of Washington
Fred Schoeneborn, FCS Consulting

Azizan Abdul-Aziz, Carnegie Mellon University
Rich Andrulis, Performance Systems Development
Rimas Gulbinas, Maalka

Mark Chambers, The District of Columbia
Anica Landreneau, HOK

Aaron Daly, Whole Foods Market
Jose Varona, University of Miami

Moderator
Alice Dasek, DOE

Moderator
Harry Bergmann, DOE

Moderator
Amir Roth, DOE

Moderators
Jessica Granderson, Lawrence Berkeley National Laboratory

Learn more at betterbuildingsinitiative.energy.gov/summit
In part 1, of this two-part session, attendees will explore solutions for overcoming barriers and raising awareness to connect efficiency and sustainability to federally supported research. By encouraging actions such as equipment sharing, efficient lab processes, and reducing overhead needs through the grant process, the federal government can shrink its environmental footprint and maximize the effective use of federal research budgets.

This session will provide a “state of the industry” for energy efficiency finance targeted at a general audience. Leading experts will give a practical summary of the range of financing products available—including leases, loans, ESPCs, ESAs, PACE, and more—and discuss their market outlook in 2016 and beyond. Topics discussed will serve as an introduction to the more detailed finance sessions later in the Summit.

Throughout history, highly visible prize competitions have spurred innovation to address society’s most difficult challenges. Despite the many innovative efficiency measures now in place, the U.S. still wastes more than half of all energy produced, and faces a future of carbon crisis and budget constraints. The Georgetown University Energy Prize is a $5 million competition between 50 communities to address this challenge.

**Panelists**
- Jim Barrett, ACEEE
- Andy Darrel, Environmental Defense Fund
- Barbara Buffaloe, Columbia, MO
- Robin Cox, Huntsville, AL
- Malini Srivastava, eFargo

**Moderators**
- Joe Indvik, JDM Associates
- Jonathan Cohen, DOE
- Chris Nelson, Georgetown University
- Phil Wirdzek, International Institute for Sustainable Laboratories (I2SL)
- Kathy Ramirez-Aguilar, University of Colorado-Boulder
## HIGH-IMPACT TECHNOLOGIES

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<tr>
<th>Panel</th>
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<tr>
<td>PANELISTS</td>
<td>Columbia 10</td>
<td>Terrace</td>
<td><strong>Integrating Distributed Generation with Energy Efficiency Programs</strong>&lt;br&gt; Distributed generation (DG) technologies offer important opportunities to reduce greenhouse gas emissions while improving the functionality and resiliency of the grid. This session will feature “real world” speakers who will discuss how various DG technologies have helped them meet their energy efficiency and sustainability goals. Come hear their experiences and how you can replicate DG for your corporate sustainability program.</td>
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<tr>
<td>PANELISTS</td>
<td>Northwest</td>
<td>Lobby</td>
<td><strong>The Internet of Things (IOT) and Energy Management in the Modern Building</strong>&lt;br&gt; Internet connectivity is revolutionizing energy using devices; everything from thermostats to lighting. In this session, we will get a look behind the scenes of the US Government’s High Performance Green Buildings as well as real world implementation of internet enabled technology in Vermont. Finally, the session will look to the future and the potential for this concept.</td>
</tr>
<tr>
<td>PANELISTS</td>
<td>Columbia 6</td>
<td>Terrace</td>
<td><strong>2016 Watch List: Emerging Energy Efficiency and Renewable Energy Technologies</strong>&lt;br&gt; A panel of DOE experts will provide a sneak peak into cutting edge and emerging clean technologies that will increase energy efficiency in buildings and infrastructure, reduce emissions, and increase the deployment of clean and renewable electrons. Areas of dialogue will include adaptive lighting and controls, buildings to grid, HVAC, water heating and appliances, windows and envelope, and sensors, controls and automation.</td>
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<tr>
<td>PANELISTS</td>
<td>Columbia 7</td>
<td>Terrace</td>
<td><strong>Looking Inside for Better Lighting Solutions</strong>&lt;br&gt; Interior lighting upgrades offer significant energy savings potential, especially when advanced lighting controls are part of the solution. This session will discuss what to look for in LED lighting systems, specifications and qualified products lists, what you should know about lighting controls and where the technology is headed. This session will also cover opportunities for technical assistance and recognition/awards through the Interior Lighting Campaign.</td>
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**ROOM** Columbia 10  
**LEVEL** Terrace  
Distributed generation (DG) technologies offer important opportunities to reduce greenhouse gas emissions while improving the functionality and resiliency of the grid. This session will feature “real world” speakers who will discuss how various DG technologies have helped them meet their energy efficiency and sustainability goals. Come hear their experiences and how you can replicate DG for your corporate sustainability program.

**ROOM** Northwest  
**LEVEL** Lobby  
Internet connectivity is revolutionizing energy using devices; everything from thermostats to lighting. In this session, we will get a look behind the scenes of the US Government’s High Performance Green Buildings as well as real world implementation of internet enabled technology in Vermont. Finally, the session will look to the future and the potential for this concept.

**ROOM** Columbia 6  
**LEVEL** Terrace  
A panel of DOE experts will provide a sneak peak into cutting edge and emerging clean technologies that will increase energy efficiency in buildings and infrastructure, reduce emissions, and increase the deployment of clean and renewable electrons. Areas of dialogue will include adaptive lighting and controls, buildings to grid, HVAC, water heating and appliances, windows and envelope, and sensors, controls and automation.

**ROOM** Columbia 7  
**LEVEL** Terrace  
Interior lighting upgrades offer significant energy savings potential, especially when advanced lighting controls are part of the solution. This session will discuss what to look for in LED lighting systems, specifications and qualified products lists, what you should know about lighting controls and where the technology is headed. This session will also cover opportunities for technical assistance and recognition/awards through the Interior Lighting Campaign.

**PANELISTS**
- Gary Londo, General Motors
- Corey Zarecki, Gundersen Health System
- Ethan Goldman, Vermont Energy Investment Corporation
- Kevin Kampschroer, General Services Administration
- Marina Sofos, DOE
- Tony Bouza, DOE
- Pat Phelan, DOE
- Karma Sawyer, DOE
- Gabe Arnold, Northeast Energy Efficiency Partnerships
- Pranav Jampani, Las Vegas Sands

**Moderator**
- Bruce Lung, DOE
- David Nemtzow, DOE
- Amy Jiron, DOE
- Linda Sandahl, Pacific Northwest National Laboratory
Energy efficiency yields multiple benefits— including the reduction of air pollutants from electric power plants, consumer cost savings, improvements to occupant health, local economic development, and more. A key issue is: how to quantify these benefits? Hear representatives from several organizations talk about resources to make the case for efficiency as a beneficial strategy that can support policies, programs and strategic plans.

What are the ingredients for successfully reducing energy usage in water and wastewater treatment facilities? In this session speakers will discuss building awareness of energy and cost saving opportunities with operational management, benchmarking and analyzing data, and adding energy considerations and funding into utility planning, among other issues.

Being an ambassador between the staff finding energy savings in your buildings and executives in the “board room” paying for them, can be an art form. In this session, attendees will come away with tips on how experts in the public and private sectors have been successful in turning energy opportunities into true savings by learning and using the language of senior leadership.

Panelists

Anselmo Collins, Los Angeles Department of Water and Power
Logan Olds, Victor Valley Wastewater Reclamation Authority
Dan Ramer, Ithaca Area Water & Wastewater Treatment Facility

Dan Cassidy, Johnson & Johnson
Erick Shambarger, Milwaukee, WI

Moderator
Scott Hutchins, DOE

Moderator
Andre de Fontaine, DOE

Moderator
Johanna Zetterberg, DOE
DATA-DRIVEN DECISION MAKING

Accelerating Access to Energy Data: How Utilities are Helping Building Owners

Utilities across the country are adopting solutions to provide property owners with easier access to whole-building energy consumption data, enabling much greater energy efficiency. Speakers will discuss energy data access trends, recent accomplishments, and future opportunities, as well as outcomes from the DOE Better Buildings Energy Data Accelerator program.

PANELISTS
Kevin Emerson, Utah Clean Energy
Drew Quirk, Xcel Energy

ROOM Columbia 9
LEVEL Terrace

Appraising Green: Show Me the Value!

Commercial building appraisals do not accurately adjust for green building attributes. This session will share observations from the Better Buildings Alliance working group, as well as, strategies and tactics building owners and lenders can employ to incorporate into business practices. Panelists will review benchmarking laws and federal tools that are providing better information about subject buildings and comparison properties.

ROOM Columbia 8
LEVEL Terrace

PANELISTS
Devesh Nirmul, INSPYROD
Dave Pogue, CBRE Group
John K. Scott, Colliers International
Theddi Wright Chappell, Sustainable Values

Moderator
Andrew Burr, DOE

Moderator
Cindy Zhu, DOE
## FINANCING AND PARTNERSHIPS

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<td>To Finance or Not to Finance: Pros and Cons of Third-Party Financing for Energy Efficiency</td>
<td>- Ph Wirdzr, I2SL</td>
<td>- Casey Bell, Urban Ingenuity</td>
<td>Columbia 4, Lobby</td>
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<tr>
<td>Greening Grants - Part 2: Efficient, Effective Use of Fed. Funding While Minimizing Enviro. Impacts</td>
<td>- Kathy Ramirez-Aguilar, University of Colorado-Boulder; Brad Copithorne, Renewable Funding; Beau Engman, PACE Equity</td>
<td>- Jeff Diehl, Rhode Island Infrastructure Bank; Ben Healey, Connecticut Green Bank; Jeffrey Schub, Coalition for Green Capital</td>
<td>Kalorama, Lobby</td>
<td>Lobby</td>
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<tr>
<td>The Future of Commercial PACE</td>
<td>- Casey Bell, Urban Ingenuity</td>
<td>- Casey Bell, Urban Ingenuity</td>
<td>Columbia 2, Terrace</td>
<td>Terrace</td>
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<tr>
<td>Green Banks 101: How They Work and How to Make Them Work for You</td>
<td>- Jeff Diehl, Rhode Island Infrastructure Bank; Ben Healey, Connecticut Green Bank; Jeffrey Schub, Coalition for Green Capital</td>
<td>- Joe Indvik, JDM Associates</td>
<td>Columbia 2, Terrace</td>
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The last five years have seen rapid growth in the number of state and local governments creating green banks to stimulate clean energy economies. Over a dozen states are now exploring green banks or have operating finance institutions. This session will provide an overview on the basics of green banks, a market outlook, and what that means for you. We’ll also feature insights and lessons learned from two successful programs.
### HIGH-IMPACT TECHNOLOGIES

**Beyond Flow Restrictors: Partners Share Their Water Savings Strategies**

**ROOM** Columbia 6  
**LEVEL** Terrace

Leading organizations are moving beyond individual water saving projects to instead take a systems approach to drive larger and more enduring water savings. Hear from a cross sector group of Better Buildings partners that are pursuing innovative approaches to sharply reducing their water consumption. In particular hear how they are achieving 10-20 percent water use intensity improvements compared to their baseline years.

**PANELISTS**
- Juliette Apicella, Southface
- Bob Bechtold, Harbec, Inc.
- Joan Kowal, Emory University

**Moderator**
- Andre de Fontaine, DOE

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**Embedded Data Centers**

**ROOM** Columbia 11  
**LEVEL** Terrace

This panel session will feature partners who will address challenges and share solutions that are unique to buildings with embedded data centers which share infrastructure with other multi-use spaces. Embedded data centers are very numerous and commonly found across multiple building sectors.

**PANELISTS**
- Brandon Hong, Lawrence Livermore National Laboratory
- John Musilli, Intel Corporation

**Moderator**
- Dale Sartor, Lawrence Berkeley National Laboratory

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**All-Star LEEPers: Success Stories from the Parking Lot**

**ROOM** Morgan  
**LEVEL** Lobby

Today’s outdoor lighting technology quickly pays for itself by cutting energy costs up to 70%. Learn about advances in parking lot lighting technologies, and how your facility can maximize savings. Panelists will share what they have done to squeeze energy (and money) from this often overlooked resource, as well as contribute to discussion around next steps for the Lighting Energy Efficiency in Parking (LEEP) campaign.

**PANELISTS**
- Frank Inoa, Arby’s Restaurant Group
- Rachel Healy, Washington Metropolitan Area Transit Authority

**Moderator**
- Paul Wessel, Green Parking Council

---

**Smart Building Planning for Charging Infrastructure**

**ROOM** Columbia 10  
**LEVEL** Terrace

Increase tenant, customer and employee satisfaction by installing electric vehicle (EV) charging stations. The U.S. is the world leader in EV sales with nearly 400,000 EVs on American roads today and thousands more on the way. This means an increased need for infrastructure to charge these advanced vehicles. In this session, employers and building owners share their experiences with charging stations including lessons learned, things to consider, and how to get your building EV-ready!

**PANELISTS**
- Lisa Chiladakis, PEV Collaborative
- Barbara Gonzales, Pepco
- Adam Langton, BMW of North America

**Moderator**
- Robert Graham, DOE
### ORGANIZATIONAL STRATEGIES

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<th>SESSION</th>
<th>ROOM</th>
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<tr>
<td>Engaging the Private Sector in State Climate/Energy Planning Processes</td>
<td>Columbia 7</td>
<td>Terrace</td>
<td>Sandy Glatt, DOE</td>
<td>Northwest</td>
<td>Terrace</td>
<td>Sandy Glatt, DOE</td>
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<tr>
<td>Why You Need to Be Best Friends with Your Communications Team</td>
<td>Columbia 7</td>
<td>Terrace</td>
<td>Amy Royden-Bloom, DOE</td>
<td>Columbia 7</td>
<td>Terrace</td>
<td>Amy Royden-Bloom, DOE</td>
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</table>

A good energy success story does more than trumpet and acknowledge achievements of a team of employees. It has the power to transform corporate culture and excite employees to want to contribute to greater energy savings. Participate in this session and learn how PRSM, Placer County, and a blogger work with energy engineers and facility managers to craft killer top-line messages that will inspire your local community, engage media, and shine a spotlight on your organization’s hard work.

As states develop energy or climate action plans, stakeholder engagement is a key element to the success of these processes and for making the case for energy efficiency. Stakeholders bring important perspectives to bear on successful mechanisms for public-private partnerships or for spurring private investment in energy efficiency. Hear from states and the private sector about successful strategies used in planning processes.

Learn strategies to effectively communicate and motivate behavior change from the people who touch our buildings every day, including specific language and techniques for gaining buy-in. This panel examines how various sectors have developed comprehensive employee and customer engagement programs to achieve greater energy and water savings than is possible by simply appointing a sustainability champion.

#### ROOM COLUMBIA 5, LEVEL TERRACE

Learn strategies to effectively communicate and motivate behavior change from the people who touch our buildings every day, including specific language and techniques for gaining buy-in. This panel examines how various sectors have developed comprehensive employee and customer engagement programs to achieve greater energy and water savings than is possible by simply appointing a sustainability champion.

#### ROOM COLUMBIA 7, LEVEL TERRACE

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#### ROOM NORTHWEST, LEVEL TERRACE

A good energy success story does more than trumpet and acknowledge achievements of a team of employees. It has the power to transform corporate culture and excite employees to want to contribute to greater energy savings. Participate in this session and learn how PRSM, Placer County, and a blogger work with energy engineers and facility managers to craft killer top-line messages that will inspire your local community, engage media, and shine a spotlight on your organization’s hard work.

#### PANELISTS

- **Barbara Buffaloe**, Columbia, MO
- **Jessica Loeper**, Verdani Partners
- **Steve Skarda**, Procter & Gamble
- **Cisco DeVries**, Renew Financial
- **Clay Nesler**, Johnson Controls
- **Bruce Condit**, Professional Retail Store Maintenance Association
- **Alexia Retallack**, Placer County
- **Kate Sheppard**, The Huffington Post

#### Moderator

- **Sandy Glatt**, DOE
- **Amy Royden-Bloom**, DOE
- **Bryan Cohen**, CplusC
MANAGING BUILDING AIR SYSTEMS IS A BALANCE OF MAINTAINING OCCUPANT HEALTH AND COMFORT WITH ENERGY EFFICIENCY. LARGE COMPLEX AIR SYSTEMS ARE CHALLENGING TO MAINTAIN AND OFTEN FAIL ON BOTH ACCOUNTS. FORTUNATELY, THERE ARE MANY AVAILABLE SOLUTIONS. THIS SESSION WILL PRESENT OPPORTUNITIES FOR INCREASED FAN ENERGY SAVINGS AND NEW STANDARD OPERATING SEQUENCES THAT OPTIMIZE AND MAINTAIN HIGH PERFORMING AIR SYSTEMS.

COMMERCIAL

PROVING THE PROFITS: INDUSTRY EFFORTS TO LINK ENERGY PERFORMANCE AND FINANCIAL PERFORMANCE DATA

ROOM Holmead West
LEVEL Lobby

Managing building air systems is a balance of maintaining occupant health and comfort with energy efficiency. Large complex air systems are challenging to maintain and often fail on both accounts. Fortunately, there are many available solutions. This session will present opportunities for increased fan energy savings and new standard operating sequences that optimize and maintain high performing air systems.

PANELISTS

Steve Dikeman, AcoustiFLO
Mark Hydeman, Continual Energy
Michael Ivanovich, Air Movement and Control Association

MODERATOR

Michael Deru, National Renewable Energy Laboratory

ROOM Columbia 4
LEVEL Terrace

Commercial real estate practitioners, researchers, financiers, and supporting organizations face data challenges when attempting to quantify the financial benefits of high-performing, energy efficient buildings. This panel features industry leaders who are working toward developing an infrastructure that will catalyze further research on the relationship between sustainability, building performance, and financial returns.

PANELISTS

David DeVos, Prudential Real Estate Investors
Jennifer McConkey, Principal Real Estate Investors
Chris Pyke, Global Real Estate Sustainability Benchmark

Moderator

Jason Hartke, DOE

ROOM Piscataway
LEVEL Lobby

Interested attendees will be matched with Financial Allies for 15-minute “speed dating” sessions to learn about financial offerings for their building portfolios. Attendees will complete a short questionnaire in advance of the Summit to identify specific financing questions and needs. There are nearly 30 Allies providing a wide range of financing solutions, including PACE, ESPCs, insurance, bonds, and more, for all building types.

FINANCIAL ALLIES

Speed Dating

Scheduled in advance

MODERATOR

Joe Indvik, JDM Associates
Holt Mountcastle, JDM Associates
**Workshop - Part 1: Energy to Finance: Understanding the CFO and Translating Metrics**

**ROOM** Columbia 12  
**LEVEL** Terrace

The Retail Industry Leaders Association (RILA) with DOE, commissioned this training developed and led by Deloitte Finance to support energy professionals in communicating the value proposition of energy efficiency projects to their corporate finance teams. This session, relevant to all commercial sectors, features CFO role insights, hands-on exercises, case studies, and guidance to get you from project idea to implementation.

**FACILITATORS**
- Martha Fung, Deloitte  
- Erin Hiatt, RILA  
- Josh Mellinger, Deloitte

**PANELISTS**
- Steve Naumann, Social Security Administration  
- Monica Miller, ThyssenKrupp Elevator  
- Dave Reid, Celanese  
- Graham Thorsteinson, General Mills

**ROOM** Columbia 10  
**LEVEL** Terrace

In this session, attendees will take a close look at smart manufacturing and advanced data analytics, which can be key to unlocking energy efficiency. These technologies can make industry more competitive through intelligent communications systems, real-time energy savings, and increased energy productivity. Topics such as building automation system, advanced energy sub-metering, and dynamic energy dashboards will be discussed.

**ROOM** Columbia 9  
**LEVEL** Terrace

Financing energy-efficiency upgrades is a perennial challenge. In this session, we discuss the tried-and-true and the latest-and-greatest methods for leveraging the value of high-quality assets and utility cost savings through recapitalization, paid-from-savings retrofits, and new finance options.

**PANELISTS**
- Rachel Gold, Rocky Mountain Institute  
- Megan Houston, Institute for Market Transformation  
- Pier LaFarge, SparkFund

**PANELISTS**
- Sachin Nimbalkar, Oak Ridge National Laboratory  
- Moderator
  - Steve Greenberg, Lawrence Berkeley National Laboratory  
- Moderator
  - Sachin Nimbalkar, Oak Ridge National Laboratory  
- Moderator
  - Michael Freedberg, HUD
Workshop - Part 1: Analyze This – Using Data to Improve Strategic Energy Plans

ROOM Columbia 3
LEVEL Terrace

This workshop will explore ways that state and local governments are using energy data to develop policy goals. During part 1 of this workshop city and state leaders will share how they leveraged creative procurement strategies to ramp up renewables in their communities and have made their communities green by securing competitively-priced renewable power supply contracts for their jurisdictions.

PANELISTS
Austin Blackmon, Boston, MA
Hayes Framme, Commonwealth of Virginia
Robert Jackson, Michigan State Energy Office

Moderator
Sarah Zaleski, DOE

Deploying Energy Efficiency in Low Income Communities

ROOM Columbia 11
LEVEL Terrace

This session will explore the complex process of braiding resources while unwinding varying requirements and incentives in low-income efficiency programs using the Weatherization Assistance Program as the foundation. Representatives of state, local and training programs will lend their insights on the strategies for assisting states in developing plans for expanding energy efficiency in low income communities.

PANELISTS
David Hepinstall, Association for Energy Affordability
Dave Reinbolt, Ohio Partners for Affordable Energy

Moderator
Jenae Bjelland, National Association for State Community Services Programs (NASCSP)
WEDNESDAY: 9:45 – 11:00 AM

**SINGLE-FAMILY**

Better Buildings Residential Network/Georgetown University Energy Prize Meet Up

**FINANCIAL ALLIES**

Financial Ally Roundtable: An Opportunity to Share and Discuss Next Steps for the Program

**PANELISTS**

Chris Nelson, Georgetown University

**MODERATOR**

Joe Indvik, JDM Associates

**ROOM** Morgan
**LEVEL** Lobby

Network and discuss a vision for the coming year. Better Buildings Residential Network members and Georgetown University Energy Prize communities are invited to share challenges, strategies for success, and ways to maximize the impact of programs and the competition in achieving energy efficiency and societal goals.

**ROOM** Piscataway
**LEVEL** Lobby

This will be a discussion-oriented gathering of Financial Allies and other financing experts to discuss how Better Buildings can transform the efficiency financing market. We'll talk about key challenges in the industry and discuss specific ideas for how DOE can work with Allies to develop new tools, resources, and networks to solve them. Come with ideas!

Moderator
Jonathan Cohen, DOE
COMMERCIAL

Workshop - Part 2: Energy to Finance: Understanding the CFO and Translating Metrics

Superstars of Energy Efficiency: Showcase Projects Achieving Big Savings

Tales from our Partners: Building Energy Efficiency into Due Diligence and Market Values

ROOM Columbia 12
LEVEL Lobby

The Retail Industry Leaders Association (RILA) with DOE, commissioned this training developed and led by Deloitte Finance to support energy professionals in communicating the value proposition of energy efficiency projects to their corporate finance teams. This session, relevant to all commercial sectors, features CFO role insights, hands-on exercises, case studies, and guidance to get you from project idea to implementation.

ROOM Holmead West
LEVEL Lobby

Better Buildings Challenge partners have contributed about 100 showcase projects to the Better Buildings Solution Center, showing strong national leadership toward an energy efficient economy and a willingness to promote best practices with other interested organizations. In this session, three partners walk through superstar showcase projects with 30% or greater energy savings, including a restaurant, bank, and retail store.

ROOM Morgan
LEVEL Lobby

Properly valuing a building’s energy efficient technologies during the due diligence process can mitigate the risk of unforeseen energy expenses and result in a more accurate portrayal of a building’s market value. In this session, several Better Buildings partners will share insights and examples of including energy efficiency in their due diligence efforts when considering a building for purchase.

FACILITATORS
Martha Fung, Deloitte
Erin Hiatt, RILA
Josh Mellinger, Deloitte

PANELISTS
Angelica Ciranni, PNC Bank
Rawson Haverty, Havertys
Frank Inoa, Arby's Restaurant Group

PANELISTS
Bruce Hall, Parkway Properties
Jim Landau, Metlife
Becca Rushin, Jamestown

Moderator
Andy Mitchell, DOE
Cindy Zhu, DOE
This round-table session will provide a forum for open-ended discussions, where Better Buildings leads, managers, and partners can interact to identify opportunities to accelerate the benefits of the partnership and brainstorm ways to increase adoption of cost effective cutting edge technology.

Incorporation of water savings into sustainability efforts is of growing interest but also a challenge for many manufacturers. Panelists in this session are leading efforts to reduce water use at their manufacturing facilities. Panelists will share their effective water saving efforts at both the corporate and facility level and address corporate strategies for implementing water saving projects.

Beyond the Better Buildings Challenge you know and love, multifamily providers can now join the Water Challenge and Renew300, which promote water efficiency and renewable energy, respectively. When planned carefully, water improvements and renewable energy can help pay for energy improvements, and vice versa. Learn about the financing mechanisms behind these projects and how they benefit communities.

PANELISTS
Muneer Chowdhury, Bridgestone Americas
Mark Dhennin, Cummins, Inc.
Sean West, United Technologies Corporation

Moderator
Prakash Rao, Lawrence Berkeley National Laboratory

PANELISTS
Benjamin Knopp, Think Little Home Energy
Susan Peterson, Foundation Communities
Caitlin Rood, Mercy Housing

Moderator
Crystal Bergemann, HUD
Workshop - Part 2: Analyze This – Using Data to Improve Strategic Energy Plans

ROOM  Columbia 3
LEVEL  Terrace

The second part of the workshop will focus on how data collection methods and advanced technology can be used to improve program participation and increase energy savings. Participants will have an opportunity to learn from public and private sector experts about how to integrate data collection methods, analytics, and advanced technologies (e.g., M&V 2.0) into their planning efforts. A breakout session format will ensure participants can share their own experiences and perspectives.

Building Energy Efficiency Policy Innovation: Perspectives from Mayors’ Offices

ROOM  Columbia 4
LEVEL  Terrace

Policies to reduce energy use in existing buildings are rapidly emerging and evolving as cities seek solutions to improve affordability, create jobs, and reduce carbon pollution. In this session, sustainability officials from three cities share their perspectives on the building energy efficiency policy landscape, the role of cities, milestone achievements, continuing challenges, and how the landscape will evolve in the future.

Building the Infrastructure for Energy Savings Performance Contracting

ROOM  Kalorama
LEVEL  Lobby

What does it take to make Energy Savings Performance Contracting (ESPC) business as usual for financing energy retrofits? Last year DOE commissioned the Energy Services Coalition (ESC) to update research into that question. Come hear about the 10 key elements for a sustainable ESPC infrastructure identified by the study and hear how Colorado and Michigan have used some of the elements to maintain decades of ESPC efforts.

PANELISTS

Matt Golden, Environmental Defense Fund
Christopher H. Russell, ACEEE

Stephanie Stuckey Benfield, Atlanta, GA
John Lee, New York City, NY
Michael Samulon, Los Angeles, CA

Dale Hahs, Energy Services Coalition
Jeanna Paluzzi, State of Colorado
Jan Patrick, State of Michigan

Moderator
Greg Dierkers, DOE
Moderator
Sarah Zaleski, DOE
Moderator
Alice Dasek, DOE

Learn more at betterbuildingsinitiative.energy.gov/summit
Uncover the Hidden: Making Home Energy Data Accessible in the Real Estate Market

The Home Energy Information Better Buildings Accelerator aims to make energy data more accessible to home buyers, real estate professionals and others. Hear how Colorado launched a statewide residential labeling initiative that made home energy data available at point of sale, how partnerships in the Northeast are incorporating energy efficiency into the Multiple Listing Service (MLS); and about Chicago’s MLS auto-population model they are working to expand.

PANELISTS
Pamela Brookstein, Elevate Energy
Lauren Hansen, Information and Real Estate Services
Carolyn Sarno Goldthwaite, Northeast Energy Efficiency Partnerships

ROOM Columbia 11
LEVEL Terrace

ROOM Piscataway
LEVEL Lobby

Financial Ally Roundtable: An Opportunity to Share and Discuss Next Steps for the Program

This will be a discussion-oriented gathering of Financial Allies and other financing experts to discuss how Better Buildings can transform the efficiency financing market. We’ll talk about key challenges in the industry and discuss specific ideas for how DOE can work with Allies to develop new tools, resources, and networks to solve them. Come with ideas!

MODERATOR
Joe Indvik, JDM Associates

Moderator
Joan Glickman, DOE
**WEDNESDAY: 2:00 – 3:15 PM**

**DATA-DRIVEN DECISION MAKING**

Transfer Tasks:
Applying Successful Energy Strategies to Water Reduction Goals

**ROOM** Columbia 3
**LEVEL** Terrace

Water efficiency is becoming more important for whole building sustainability. Hear about a new tool for real-time water tracking in office buildings, and how The Tower Companies is piloting its use. Transwestern is using a water-rating program across its portfolio to inform future strategies in reducing water use. Eastman Chemical will share experiences from the industrial sector.

**PANELISTS**
Travis Blomberg, Transwestern
Brandon Chase, Aquicore
Sharon Nolen, Eastman Chemical Company

**Moderator**
Cindy Zhu, DOE

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**FINANCING AND PARTNERSHIPS**

Energy Investment Partnerships:
Leveraging Private Capital for Public Financing Programs

**ROOM** Morgan
**LEVEL** Lobby

State and local governments are increasingly partnering with private sector financiers to provide capital for clean energy projects, using traditional development finance and other tools. This session will explore several successful models in this space and provide a forum for Financial Allies, state and local governments looking to capitalize programs, and attendees seeking financing for projects in their buildings.

**PANELISTS**
Toby Rittner, Council of Development Finance Agencies
Adam Zimmerman, Craft3

**Moderator**
Eleni Pelican, DOE

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Reinventing “Energy Efficiency as a Service”: Lessons Learned and New Models

**ROOM** Columbia 12
**LEVEL** Terrace

Financiers are increasingly finding market traction by selling energy efficiency as a service. Going beyond the traditional ESPC approach, new “efficiency as a service” models such as energy savings agreements are serving a wider range of sectors and project types. This session will explore the benefits of services contracts, share insights from leading financiers, and educate attendees on how to access this type of financing.

**PANELISTS**
Angela Ferrante, SparkFund
Bob Hinkle, Metrus Energy

**Moderator**
Joe Indvik, JDM Associates
Quietly Plotting the Next Revolution: Smart Buildings

Packaged Combined Heat and Power: Off the Shelf Solutions

Energy Storage: Is it Right for Your Building?

Are You Forgetting About Your Rooftop Units? Efficiency for Packaged HVAC

ROOM Jay
LEVEL Lobby
A suite of new technologies will transform the way buildings use energy and interact with its human occupants. These “Smart Building” technologies are easy to overlook, as they come packaged in typical technologies such as electricity meters and building management systems. Join this open discussion to learn how we can harness big data and new technology to transform the way buildings operate with the resulting energy savings of 1 Quadrillion Btu nation-wide at 100% adoption.

ROOM Columbia 4
LEVEL Terrace
Organizations are beginning to consider energy storage options, but little information is publicly available on benefits, business models, or best practices. In this session, attendees will review the business cases for energy storage and how it can help you manage energy spend. Panelists will share benefits and experiences implementing some of their first storage projects, including: why they pursued energy storage, what values they are getting, implementation plans and lessons learned.

ROOM Columbia 11
LEVEL Terrace
When’s the last time you checked on your buildings’ rooftop units? Let’s face it, RTUs aren’t the most exciting building system, but the savings potential is enormous. Walmart and Starbucks will share experiences and insights on recent RTU management and efficiency efforts. Join the conversation and learn about the Advanced RTU Campaign’s new resources that can be immediately incorporated into commercial building practices.

ROOM Columbia 10
LEVEL Terrace
Combined Heat and Power (CHP) has long been viewed as a custom solution for a variety of facility types. In this panel, speakers will discuss the opportunity to develop, market and incentivize pre-packaged CHP solutions that will reduce cost and risk while allowing for easier promotion by utilities, states, or other programs.

PANELISTS
Josh Clyburn, NYSERDA
Drew Quirk, Xcel Energy

PANELISTS
Greg Farley, Chesapeake College
Steve Kelley, Green Charge Networks

PANELISTS
Melissa Green, Starbucks
Jim McClendon, Walmart

PANELISTS
Dana Levy, NYSERDA
Richard Sweetser, Exergy Partners
Lee Vardakas, Aegis Energy Services

Moderator
Jessica Granderson, Lawrence Berkeley National Laboratory

Moderator
Jay Paidipati, Navigant Consulting

Moderator
Marta Schantz, Waypoint Building Group

Moderator
Caludia Tighe, DOE
WEDNESDAY: 2:00 – 3:15 PM

ORGANIZATIONAL STRATEGIES

Health and Home Performance: A Game Changer

ROOM   Holmead West
LEVEL   Lobby

Combining health and home performance (HHP) offers unprecedented potential to increase market size and benefits. Poorly performing homes due to roofing, heating, electrical, or water issues, are associated with issues, such as respiratory illness, asthma, and injury. DOE is undertaking three initiatives including a review of existing HHP literature; stakeholder engagement; and developing a roadmap to expand HHP.

Engaging your Suppliers to Multiply the Benefits of Energy Efficiency

ROOM   Columbia 9
LEVEL   Terrace

The majority of a company’s energy and greenhouse gas footprint often resides within its supply chain. While opportunities exist to improve it, challenges can include: prioritizing which suppliers to work with; determining what types of requests to make of them; and evaluating data to measure progress. This panel explores the models organizations are developing and adopting to advance supply chain energy efficiency.

Turn On, Tune In, Don’t Opt Out: Manufacturers Successfully Leveraging Utility Efficiency Programs

ROOM   Kalorama
LEVEL   Lobby

Many rate payer-funded efficiency programs suffer from low participation from the industrial customer base. Industrial customers more often than not opt out of program participation, even though they can represent large savings opportunities. This session explores the perspectives of industrial customers who understand the value of energy efficiency program participation—when programs are designed to meet their unique needs.

PANELISTS

Kevin Kennedy, Children’s Mercy Hospital & Clinics
Ellen Tohn, Tohn Environmental Strategies
Jonathan Wilson, National Center for Healthy Housing

PANELISTS

Ethan Rogers, ACEEE
Sean West, United Technologies Corporation

PANELISTS

Gary Londo, General Motors
Graham Thorsteinson, General Mills
Bob Taylor, Energy Pathways and Institute for Industrial Productivity

Moderator
Jonathan Cohen and Ely Jacobsohn, DOE

Moderator
Andre de Fontaine, DOE

Moderator
Sandy Glatt, DOE
DATA-DRIVEN DECISION MAKING

**Keeping Score:**
DOE’s Building Energy Asset Score in the Marketplace

**ROOM**  Columbia 3  
**LEVEL**  Terrace  

DOE’s Building Energy Asset Score has been used to assess energy efficiency opportunities in buildings totaling over 80 million square feet nationwide. Panelists will discuss their experiences using the Asset Score, including how it has added value and how it relates to other building energy evaluation tools. DOE will also provide an update on recent Asset Score improvements and the Asset Score National Leadership Network.

**Lessons for Improving Home Upgrade Programs – Better Buildings Accelerator**

**ROOM**  Northwest  
**LEVEL**  Lobby  

Come hear how home upgrade program administrators have reduced administrative burdens for themselves and their partners and are achieving better results. Home Upgrade Program Accelerator Partners will share their strategies to enhance data management, contractor relationships, and customer experiences and approaches to improve program processes. Explore how these ideas can be implemented in programs across the country.

**PANELISTS**

- Sara Schoen, Clarion Partners
- Greg Thomas, Performance Systems Development

**Moderator**  
Andrew Burr, DOE

**PANELISTS**

- Torsten Glidden, Build it Green
- Tim Miller, Enhabit
- Melanie Paskevich, NeighborWorks of Western Vermont

**Moderator**  
Dale Hoffmeyer, DOE
Energy Efficiency Financing for Low Income Communities

As deployment of capital into efficiency projects accelerates, there is increasing interest in aggregating these projects into an asset class for investors. Can efficiency follow in solar’s footsteps with regards to technical standardization? And can it be securitized to lower capital costs to the benefit of building owners? Experts on technical standards and secondary markets will discuss their outlook in 2016 and beyond.

PANELISTS
Tammy Agard, Eetility
Donnel Baird, Blocpower
Greg Leventis, Lawrence Berkeley National Laboratory

Moderator
Eleni Pelican, DOE
WEDNESDAY: 3:45 – 5:00 PM

HIGH-IMPACT TECHNOLOGIES

PATHS TO PERFORMANCE

Energy Efficiency for Large Building Chiller Systems

ROOM Columbia 10
LEVEL Terrace
Do you know how your chiller plant is performing? Chiller plants are large and complex, and maintaining these systems at a high level of performance can be challenging. This session will cover a range of methods to help you better monitor and understand chiller plant performance and how to use this information to make informed decisions to get the most of your chiller plant.

Results from the Field: Highlights from Technology Demonstration Projects

ROOM Kalorama
LEVEL Lobby
Each year DOE’s Building Technologies Office develops a HIT List: a list of innovative and promising high impact technologies. DOE works with industry partners to carry out technology demonstration projects, testing energy savings for these techs in the field. Learn about early results from these demos as well as opportunities to participate in upcoming demos.

Zero Energy Buildings – Tales from Those Who Have Built Them

ROOM Columbia 4
LEVEL Terrace
The ZEBs just keep coming! Learn how a bank, an elementary school and a manufacturing complex are using the zero energy design process of integrating energy and architecture to become leaders in their industry. Additionally, panelists will discuss the policies driving new projects, stakeholder engagement, best practices for successful outcomes and challenges in the construction process.

PANELISTS
Glen Anderson, ETC Group
Matthew Gudorf, University of California, Irvine
PJ Piper, QM Power
Kevin Powell, GSA
Gabe Arnold, Northeast Energy Efficiency Partnerships
Michael H. Wolf, enVerid Systems
Moderator
Michael Deru, National Renewable Energy Laboratory

PANELISTS
Philip Riggs, Erie County Industrial Development Agency
John Chadwick, Discovery Elementary
Bakari Kennedy, Suncoast Credit Union
Moderator
Charlie Llenza, DOE

Moderator
Jason Hartke, DOE
When hurricanes and other disasters affect the built environment, there is one technology proven to keep the lights on when all else is dark. Combined heat and power (CHP), an established energy generation technology, can be a valuable resource that can save money and lives. In this panel speakers representing the public and private sectors will discuss the importance of incorporating CHP into the planning process for critical facilities.

Energy efficiency programs can communicate with jargon and technical terminology, which puts off homeowners. However, marketing best practices suggest wording based on improved consumer experience is more effective. Based on expert meetings and public review, DOE developed the Building America Building Science Translator that converts technical jargon to a language of value for hundreds of home performance measures.

Learn how your organization can benefit from new Better Buildings Workforce recognized professional certification programs to find the best qualified candidates when hiring or contracting for energy-related work. A new, low-cost certificate program will also be introduced, which can help to ensure that your staff or consultants using ENERGY STAR® Portfolio Manager know how to achieve accurate and informative results.