Capturing Energy Upgrades in the Real Estate Transaction
• Largest professional association of real estate appraisers in the United States
  – 23,000 members in 60 countries
  – More than half of all professional designated appraisers affiliate with AI
  – Largest publisher of appraisal texts in the world
  – One of the largest education providers
  – Confers the MAI and SRA designations
“I recently worked on an appraisal for a LEED Platinum home. It is the only one in the state. I have a rather sophisticated ROI Excel sheet for the solar panels. To make a long story short, the lender would not allow any adjustments with any direct comparables. There are almost zero closed sales with PV systems. I fought the good fight and all it did was get me sanctioned by the Appraisal Management Company (AMC).”
With this one case, a host of complications

- Questions should be asked of the lender before the appraisal is started
- Appraiser may need to ask the lender to put in writing how they will underwrite the PV system. If they tell you up front, they do not include them in the value of the home appraiser may need to take further steps to cover themselves
- Appraisal scope of work may need to include the lender instructions. The appraiser may also want to make a hypothetical condition stating the lender has insisted no value be attributed to the PV system even though you have support for an adjustment. The borrower should know this up front as well to avoid a long argument and series of phone call from them
Appraisal Myths

• Performed for borrower
  – Reality – for lender risk management

• To confirm contract sales price
  – Reality – one transaction does not make a “market”

• Don’t consider energy efficient features
  – Reality – appraisals to analyze features that have a material effect on value
Appraiser Challenges

• **Data**
  – We would all like to see paired sales to prove our adjustments in the market but at this time, we do not have sufficient sales to provide that analysis.
  – There are market studies being done that may soon give us some more support or guidance.

• **Communication**
  – Appraisers are often not provided necessary information to complete a thorough analysis of the market

• **Procurement Processes**
  – The current appraisal procurement system is wholly deficient to address these issues
Appraisal Considerations: The Cost Approach

- Consider value of green features
- What are energy savings?
- What is the economic life of a green feature?
- Do green features add or detract from curb appeal?
- What are the current costs to replace green products?
Valuing Green Buildings: Residential

Appraisal Considerations: The Sales Comparison Approach

- Observe instillation of energy efficient features
- Rely on paired data analysis
- Note adjustments will be based on contributory value – not cost
Appraisal Considerations:
The Income Capitalization Approach

• Applicable for two- to- four-unit or non-owner occupied properties (see slides on commercial appraisal considerations)
Appraisal Considerations: The Income Approach

- *Green building investment hypothesis*
- Note property revenue
- Verify turnover rates
- Record rate of absorption
- Use DCF analysis
- Record value impact of incentives
Appraisal Institute
Actions

• Education
  – The Appraisal Institute has developed education on this subject nearly a decade ago
  – We’ve hosted a series of webinars, seminars and courses on the subject
  – Our latest offering is a Professional Development program on the Valuation Sustainable Buildings
    • Introduction to Green Buildings
    • Case Studies in Appraising Green Residential Buildings
    • Case Studies in Appraising Green Commercial Buildings
    • New Solar Valuation course developed in consultation with Sandia National Laboratory

• Public Policy
  – SAVE Act, GREEN Act

• Appraisal Forms
  – Residential Green and Energy Efficient Addendum
SAVE Act Introduction
## Energy Efficient Items

The following items are considered within the appraised value of the subject property:

<table>
<thead>
<tr>
<th>Insulation</th>
<th>R-Value:</th>
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<tbody>
<tr>
<td>☐ Fiberglass Blown-In</td>
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<tr>
<td>☐ Foam Insulation</td>
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<tr>
<td>☐ Cellulose</td>
<td></td>
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<tr>
<td>☐ Fiberglass Batt Insulation</td>
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<tr>
<td>☐ Other (Describe):</td>
<td></td>
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<tr>
<td>☐ Basement Insulation (Describe):</td>
<td></td>
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<tr>
<td>☐ Floor Insulation (Describe):</td>
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<table>
<thead>
<tr>
<th>Water Efficiency</th>
<th>Location:</th>
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<tbody>
<tr>
<td>☐ Reclaimed Water System (Explain):</td>
<td></td>
</tr>
<tr>
<td>☐ Cistern - Size: Gallons</td>
<td></td>
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<tr>
<td>☐ Rain Barrels Provide Irrigation</td>
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<td>☐ Rain Barrels - #:</td>
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<tr>
<th>Windows</th>
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<tbody>
<tr>
<td>☐ ENERGY STAR®</td>
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<tr>
<td>☐ Low E</td>
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<td>☐ High Impact</td>
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<td>☐ Storm</td>
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<td>☐ Double Pane</td>
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<td>☐ Triple Pane</td>
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<td>☐ Tinted</td>
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<td>☐ Solar Shades</td>
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<th>Day Lighting</th>
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<td>☐ Skylights - #:</td>
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<tr>
<td>☐ Solar Tubes - #:</td>
<td></td>
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<tr>
<td>☐ ENERGY STAR Light Fixtures</td>
<td></td>
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<tr>
<td>☐ Other (Explain):</td>
<td></td>
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</table>
Solutions

• The current appraisal procurement model is broken – Fast and Cheap cannot continue
• Robust data, that is usable by appraisers
• Improved communications between consumers, developers, lenders, and appraisers
Questions?
Thank You!

Bill Garber
202-298-5586
bgarber@appraisalinstitute.org

To learn more about the Appraisal Institute:
www.appraisalinstitute.org