



**Appraisal Institute<sup>®</sup>**

*Professionals Providing Real Estate Solutions*

**Integrating Energy  
Efficiency in the  
Mortgage Process**



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

Presented By:

Bill Garber

Director of Government and External Relations

Appraisal Institute

122 C Street, NW Suite 360

Washington, DC 20001

202-298-5586

[bgarber@appraisalinstitute.org](mailto:bgarber@appraisalinstitute.org)

# Appraisal Reality



Appraisal  
Institute®

Professionals Providing  
Real Estate Solutions

From an AI member (2002):

*“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).”*

# Appraisal Reality



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

- 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 Reality



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

- Appraisals are used for lender risk management
- Appraisers reflect the market, they don't create the market
- Appraisals must be thoroughly researched and supported
- It would be inappropriate to use rule of thumbs (e.g. 10 percent for labels)



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

# 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

# Valuing Green Buildings: Residential



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

## 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  
Institute®

*Professionals Providing  
Real Estate Solutions*

## 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



# Valuing Green Buildings: Residential



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

## Appraisal Considerations: The Income Capitalization Approach

- Applicable for two- to- four-unit or non-owner occupied properties (see slides on commercial appraisal considerations)

# Valuing Green Buildings: Commercial



Appraisal  
Institute®

Professionals Providing  
Real Estate Solutions

## 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



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*


- 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
- Public Policy
  - SAVE Act, GREEN Act
- Appraisal Forms
  - Residential Green and Energy Efficient Addendum

# AI Green Addendum



**Appraisal  
Institute®**

*Professionals Providing  
Real Estate Solutions*

 <b>AI Reports®</b> Form 820.03*	Client File #:	Appraisal File #:	
	<h2>Residential Green and Energy Efficient Addendum</h2>		
	Client:		
	Subject Property:		
City:		State:	Zip:
Additional resources to aid in the valuation of green properties and the completion of this form can be found at <a href="http://www.appraisalinstitute.org/education/green_energy_addendum.aspx">http://www.appraisalinstitute.org/education/green_energy_addendum.aspx</a>			

ENERGY EFFICIENT ITEMS						
The following items are considered within the appraised value of the subject property:						
Insulation	<input type="checkbox"/> Fiberglass Blown-In <input type="checkbox"/> Foam Insulation <input type="checkbox"/> Cellulose <input type="checkbox"/> Fiberglass Batt Insulation				R-Value:	
	<input type="checkbox"/> Other (Describe):				<input type="checkbox"/> Walls	
	<input type="checkbox"/> Basement Insulation (Describe):				<input type="checkbox"/> Ceiling	
	<input type="checkbox"/> Floor Insulation (Describe):				<input type="checkbox"/> Floor	
Water Efficiency	<input type="checkbox"/> Reclaimed Water System (Explain):		<input type="checkbox"/> Cistern - Size:    Gallons		Location:	
	<input type="checkbox"/> Rain Barrels - #:		<input type="checkbox"/> Rain Barrels Provide Irrigation			
Windows	<input type="checkbox"/> ENERGY STAR®	<input type="checkbox"/> Low E	<input type="checkbox"/> High Impact	<input type="checkbox"/> Storm	<input type="checkbox"/> Double Pane <input type="checkbox"/> Triple Pane	<input type="checkbox"/> Tinted <input type="checkbox"/> Solar Shades
Day Lighting	<input type="checkbox"/> Skylights - #:	<input type="checkbox"/> Solar Tubes - #:	<input type="checkbox"/> ENERGY STAR Light Fixtures		<input type="checkbox"/> Other (Explain):	

# PACE Program



Appraisal  
Institute®

Professionals Providing  
Real Estate Solutions

- FHFA has issued a request for comment on PACE
  - The existence of a PACE loan is comparable with situations that involve a special assessment for sewer or water. The special assessment can pass to the new buyer or be paid off by the seller. When paid off by the seller, it is negotiated in the sale price.
  - This is a form of sales or seller concession. Recognized appraisal methodology would likely deduct this concession dollar for dollar under a “cash equivalency” basis.
- The appraiser would consider the PACE loan as a concession paid by the seller and derives its cash equivalency, so the price paid for Sale 2 is equal to Sale 1. As a result, the appraiser would deduct \$10,000 from Sale 2’s price.



	Sale 1	Sale 2
Sale Price	\$175,000	\$185,000
Concessions	None- No PACE or Utility Loan	Seller paid \$10,000 PACE Loan or utility payment
Financing	Conventional mortgage	Conventional Mortgage
Date of contract	7/2/2011	7/31/2011
Energy Efficiency	Good – HERS 55	Good- HERS 58



# Green Building Market Acceptance



Appraisal  
Institute®

*Professionals Providing  
Real Estate Solutions*

## Critical Mass and Market Recognition

- Green building demand
- Climate change
- Improving public image
- Global emphasis on carbon reduction and neutrality
- Personal satisfaction
- Costs Savings



**Appraisal  
Institute®**

*Professionals Providing  
Real Estate Solutions*

**Questions?**



**Appraisal  
Institute®**

*Professionals Providing  
Real Estate Solutions*

# Thank You!

**Bill Garber**

202-298-5586

[bgarber@appraisalinstitute.org](mailto:bgarber@appraisalinstitute.org)

To learn more about the Appraisal Institute:

[www.appraisalinstitute.org](http://www.appraisalinstitute.org)