



## **Model Scope of Services for Green Building Valuation©**

Peer review completed October 2012

This Model Scope of Services© provides:

- Background on green property valuation
- Purpose of scopes of services in appraisal contracts
- Purpose of this Model Scope of Services
- Documentation to be provided to the appraiser
- Liability risk reduction
- Incorporation of this Model Scope of Services into contracts for services
- Model Scope of Services language for contracts
- Appendix of green property valuation resources
- Copyright protection
- Use disclaimer of liability

**Background.** The Appraisal Institute, Environmental Bankers Association, Capital Markets Partnership, and their Partners are conducting Green Property Valuation and Cheaper Cost of Capital and Insurance and Pilots. The Pilots are using green properties undergoing appraiser valuation with Appraisal Institute resources and publications, and extensive capital markets resources documenting added green property value including achieving *Green Value Scores* pursuant to the national consensus Green Building and Home Underwriting Standards.

Also, the capital markets are moving forward with national green building and home financing through publicly traded securities creating an expected national financial stimulus due to the substantial secondary financing market size and need as documented by the capital markets. Citi, the States, and Capital Markets Partnership (CMP) announced the first green property bond / security at the CMP/ Appraisal Institute September 2012 Event at TIAA-CREF in NYC.

Discounted insurance for green buildings and homes is available by Fireman's Fund (FFIC) (5%), Liberty Mutual (10%), Allstate and other carriers. FFIC discounts are based on reduced green building loss ratios.

To ensure accurate and competent development of value to meet the market need, this Appraisal Institute / Capital Markets Partnership Model Scope of Services with suggested comprehensive resources in the Appendix, is being used for the Valuation and Cheaper Cost of Capital and Insurance Pilots at the recommendation of leading financial institutions that are Members of Appraisal Institute, Capital Markets Partnership, and Environmental Bankers Association. This Model Scope of Services is also made available to Appraisal Institute and Capital Markets Partnership Members for their use in green property valuation.

**Purpose of Scopes of Services for Real Estate Appraisal Services.** Scopes of work or services are part of the contract for services for appraisal of property value including those that are green, i.e., environmentally and energy efficient. As part of the contract of services, appraisers and their clients are bound to achieve the duties and responsibilities of the scope.

**Purpose of this Model Scope of Services.** Many clients do not instruct the appraiser in the engagement of services and the scope of work, to value the attributes of properties that are green that are part of the valuation engagement. Accordingly, this Model Scope of Services has been prepared both to meet the need of this circumstance during contract and scope negotiation, as well as for the Valuation and Cheaper Cost of Capital and Insurance Pilots.

**Methods of Developing Green Property Value.** This Model Scope of Services does not suggest any new procedure for developing property value.

### **Documentation to Be Provided to the Appraiser**

The client should supply a competent real estate appraiser with the following documents and information for analysis. This information should be supplied in advance of the bidding process if an electronic bidding system is utilized by the client of the appraiser.

1. **LEED or GreenPoint RATED Scorecard** (if appropriate). Alternatively, if certified by another organization, the checklist used by the certifier should be provided to the appraiser.

Comment: This document assists the appraiser in understanding the number of green property attributes that could positively affect value. For instance, a commissioned commercial building will have an independent third party Commissioning Report verifying that the building was built as designed. See Commissioning Report in number 6 below. The Scorecard is extremely useful in documenting the details on the subject property.

2. **Contact information for the responsible party for details of the green property**, (e.g., LEED consultant, architect(s), and engineer)

Comment: This will help inform the appraiser about the components and makeup of the property. An appraiser can never have too much information, especially when one or more parties of a transaction may have applicable information.

3. **Energy modeling results for commercial properties & efficiency documentation for all properties**

Comment: Energy modeling results and energy efficiency documentation can be critical in analyzing cost implications due to various green energy strategies or components. The appraiser should verify that the assumptions used are realistic and that they fit the manner in which the facility will be used. The greatest risk with energy modeling is that the assumptions employed do not fit actual building use and will result in an under- or overestimate of utility costs. Carbon energy price volatility and increases from leading energy investment bankers based on actual globally validated data should be consulted (*Reducing Risk and Measuring Added Value For Building Energy Use*, CMP 2010).

Online platforms like Sustainable Real Estate Solutions (SRS) referenced in the Appendix, provide important metrics for commercial properties on energy efficiency through the EPA ENERGY STAR Score, ASTM Building Energy Performance Standard Result, and Underwriting Standard Green Value Score which includes efficiency (40% of the Score). SRS also contains energy efficiency comparables by zip code throughout the US and data on 120,000 green properties.

For homes, the Underwriting Green Value Score uses the HERS Standard and requires a minimum HERS Score of 71 to achieve a Green Value Score. The minimum Green Value Score of 25 (25-100 Score) was set as part of the Green Value Score market test by JPMorgan, Jones Lang LaSalle, CBRE, and Transwestern, to identify the minimum Score level where there is a high level of certainty that the green property attributes increase value.

#### **4. Plans and specifications**

Comment: Even in an existing property, these documents should be made available if possible. Specifications should include product descriptions from manufacturers. This helps inform the appraiser of what is actually found at the property.

#### **5. Intended goals of construction or retrofit**

Comment: Intended goals and projections of new construction or retrofit should be provided to the appraiser. Once the validity of the energy modeling projections or actual energy use from utility bills is established, the appraiser can make assumptions about projected energy savings.

#### **6. Commissioning Report** (for commercial)

Comment: Commissioning is used to evaluate whether the systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the owner's project requirements including property design. This process is viewed by a number of institutional investors as a prime mechanism of risk mitigation. This factor should be considered when comparing the subject with its competitive set. Lawrence Berkeley Labs documented from 60 properties that Commissioning adds about \$1 / ft<sup>2</sup> in value for energy savings alone from avoided building component failures (Capital Markets Partnership / Urban Land Institute *Green Building Underwriting & Integrative Process Education* 2012).

#### **7. Tenant leases** (for commercial)

Comment: Among other things, this is important to analyze who benefits from energy efficient improvements – the owner or tenant. It is also helpful to determine whether the leases within the building are similar to and competitive with those signed at the comparable properties. In the area of green strategies, tenant improvements (TIs) and space design have seen great innovation in recent years and should be closely investigated with respect to longer-term costs and potential savings. There could be considerably reduced downtime between leases and construction and material costs, as well as risk levels associated with space delivery and construction—depending upon the strategies, design, and components used.

#### **8. Property Tax rebates or discounts** (including public sector, private sector or utility)

Comment: Where incentives are substantially monetary in nature or result in monetary, direct, and exclusive benefits to the project or owner, there is a good chance that value may be affected. The appraiser should be prepared to understand and address the contributory value of incentives. This information is important to Discounted Cash Flow Analysis as any rebates or incentives go to the bottom line of the income approach. It may also have bearing on the cost approach.

## 9. Integrative Process (IP)

Comment: If conducted, the IP documentation should be provided to the appraiser by the property developer or owner. IP changes the inefficient linear property design and construction process by engaging the owner, architect, engineer and key subcontractors in workshops at the pre-design stage and several other key stages to identify property green design and construction parameters. IP has been documented as reducing construction and operating costs and risk. See CMP / ULI *Green Building Underwriting & IP Education Program Slides*, *Fireman's Fund IP Risk Reduction Statement*, & *National Consensus Green Home & Building Underwriting Standards*. For the higher levels of green property performance, construction costs become excessive without IP. IP is provided credit in LEED for Homes and other LEED properties and is set forth in the ANSI IP American National Standard: <http://webstore.ansi.org/RecordDetail.aspx?sku=MTS+2012%3a1#UHVaAY7XIGc>

## 10. Financial Benefits

Comment: This is important to determine the extent that a discrete loan that stays with the upgrade package may be below or above market and attractive or unattractive to assume.

**Liability Risk Reduction & Disclaimer.** Liability risk for all parties part of green property design, construction, and financing where appraisers are engaged, can be reduced by ensuring that best resources are identified to perform competent green property appraisal. Accordingly, the Model Scope of Services Appendix below lists resources that can be used by appraisers in developing competent judgments on value.

As additional resources, The Appraisal Institute offers educational programs on green property value that can help with valuation. See <http://www.appraisalinstitute.org/education/green/default.aspx>

Also, the Capital Markets Partnership (CMP) and Urban Land Institute (ULI) offer Green Building Underwriting and Integrative Process Education through interested ULI Chapters that can help with use of tools reducing green building risk and increasing value such as integrative process: see Appendix below and contact CMP for further information [mts@sustainableproducts.com](mailto:mts@sustainableproducts.com)

However, this Model Scope of Services for green property valuation is not a substitute for normal means appraisers use to reduce liability risk including their independent decisions on:

- Green property education and professional certifications
- Insurance
- Engagement of qualified and competent professionals to assist in developing value
- Engagement of attorneys
- Drafting of appraisal contracts for services and scopes of work

Accordingly, this Model Scope of Services does not address suggested contract of services or scope of work for services language dealing with potential appraiser or client liability.

**Incorporation of This Model Scope of Services.** With the recognition of the preceding liability risk disclaimer and use disclaimer of liability at the end of this Model Scope, appraisers should feel free to use this Model Scope of Services in whole or in part for incorporation into their scopes of services for competent appraisal services, as well as all or any part of the following Model Scope language.

## **Model Scope of Services Language for Green Properties:**

*This Scope of Services that is part of the contract for appraisal services, specifically requests that the green attributes of the property or properties specified in appraisal engagement of services, be independently and competently evaluated with a development of any added value from the property's green attributes.*

*Green properties achieving leadership national consensus standards of performance have sufficiently advanced in the market so that competent valuation of green attributes can be developed.*

*Further, there are sufficient green property valuation resources available to assist in a competent development of value. Comparable data on green building attributes exist nationally for commercial properties but are not available for all residential markets. As an appraisal resource in the development of value, National consensus green building underwriting standards allow calculation of a Green Value Score on any home, commercial, or residential property in the US based on recognized green building attributes increasing value from peer-reviewed Wall Street due diligence released at the NYSE. The due diligence consists of over 30 reports, consensus standards, and investor surveys, reviewed at national public meetings at Federal Reserve Offices, and by Treasury and the Federal Reserve Board, and is accessible in the Memorandum to the Treasury and the Federal Reserve cited in the Appendix below.*

*For commercial properties, McGraw-Hill market surveys estimate that green properties are over 40% of all new construction or retrofits, and the leading home builders build only green homes to leadership consensus green home standards (White Paper, National Green Building Financing Launch at TIAA-CREF, Sept. 28, 2012).*

*A competent development of green property value is the responsibility and independent professional judgment of the appraiser.*

## **APPENDIX**

### **GREEN PROPERTY VALUATION RESOURCES**

*Appraisal Institute Residential Green and Energy Efficient Addendum (Form 820)*

[http://www.appraisalinstitute.org/education/green\\_energy\\_addendum.aspx](http://www.appraisalinstitute.org/education/green_energy_addendum.aspx)

*Appraisal Institute Introduction to Valuing Commercial Green Buildings*

<http://www.appraisalinstitute.org/library/bok/IntroGreen.pdf>

*Case Studies in Appraising Green Commercial Buildings including functional obsolescence*

[http://www.appraisalinstitute.org/education/course\\_descr/PDFs\\_for\\_Web/Course\\_828/toc-case-studies-green-comm-bldgs.pdf](http://www.appraisalinstitute.org/education/course_descr/PDFs_for_Web/Course_828/toc-case-studies-green-comm-bldgs.pdf)

*Appraisal Institute Green Building Education*

<http://www.appraisalinstitute.org/education/green/default.aspx>

*Appraising Energy Star Qualified Homes*

[http://www.energystar.gov/ia/partners/bldrs\\_lenders\\_raters/downloads/Appraising\\_ENERGY\\_STAR\\_Qualified\\_Homes\\_Slides.pdf](http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/Appraising_ENERGY_STAR_Qualified_Homes_Slides.pdf)

*Capital Markets Briefing Paper green building business case released at the NYSE*

<http://webstore.ansi.org/FindStandards.aspx?Action=displaydept&DeptID=3144#.UGiO2Y7XfQc>

### *Green Building Value Rating System*

<http://webstore.ansi.org/FindStandards.aspx?Action=displaydept&DeptID=3144#.UGiO2Y7XfQc>

### *Integrative Process for Sustainable Properties & Communities American National Standard, the basis of Fireman's Fund Risk Reduction Statement for green properties*

<http://webstore.ansi.org/FindStandards.aspx?Action=displaydept&DeptID=3144#.UGiO2Y7XfQc>

### *Memorandum to Treasury and the Federal Reserve on Added Green Building Value with the link to over 30 reports, consensus standards, and investor surveys documenting added value including national reports with statistically valid data in Wall Street Due Diligence Released at the NYSE.*

<http://webstore.ansi.org/FindStandards.aspx?Action=displaydept&DeptID=3144#.UGiO2Y7XfQc>

### *National Consensus Green Building Underwriting Standards for homes and commercial buildings*

<http://webstore.ansi.org/FindStandards.aspx?Action=displaydept&DeptID=3144#.UGiO2Y7XfQc>

### *Sustainable Real Estate Manager Peer Building Benchmarking National Data Base of 125,000 commercial green buildings with comparable building energy efficiency data by zip code*

<http://www.srmnetwork.com/>

## **Copyright Protection**

This Model Scope of Services is protected by copyright law and any unauthorized use or reproduction for non Appraisal Institute or Capital Markets Partnership Members is strictly prohibited. Please contact the Appraisal Institute or Capital Markets Partnership for permission for use. Thank you.

## **Use Disclaimer of Liability**

This Model Scope of Services is provided for optional use for green property appraisals. By its use, any and all parties using in any way this Model Scope in full or part, hereby disclaim any and all liability and potential liability, including costs and attorneys fees, to the Appraisal Institute and Capital Markets Partnership.