

## A Performance Based Real Property Valuation Model

The time for trivializing the state of our environment is behind us. Our stakes have matured. With the world's economies and natural resources fully inter-connected, neighbors on all sides now express their concerns in concert at polluters and deniers of the earth's vulnerability.

Likewise, the latest economic downturn demonstrated the inter-connectivity of the world's economies; whether developed or emerging. The Great Recession has affected us all. "Sustainability" as a concept had been reserved in contemplation to management of the earth's natural resources, but now it surely embraces economic viability in equal weight.

In terms of single industries, real estate bears most heavily on the natural world and our economy. As evidenced by the genesis of The Great Recession, a real estate tumble can spill over into many other ancillary industries, and when in an aggravated condition, it can cloud nearly every industry and burden every checkbook. As real property valuations go, so goes our economy.

What has made this recession so great, is that the real estate industry has taken such a pervasive hit. Valuations, access to mortgage finance, foreclosures, bank failures, litigation, regulation, and others and have converged to affect a systemic failure. The resulting malaise has proved difficult to shake off. The question is thereby begged; how can we get the real estate industry directed on a positive course? The follow up question is whether sustainable principles are expected to act as a central catalyst to a real estate industry recovery. The answer to both is through the placement of proper value on green buildings.

In most real estate transactions, mortgage and/or mezzanine financing are requirements to making deals go. In real estate finance, determining a given property's market value is pivotal in the decision making process on whether or not collateral is sufficient to lend, and what specific loan terms justify the overall credit risk. An appraisal report serves the function of offering a real estate professional's opinion of market value, based on hard data and reasoned analytics.

The appraisal's place in real estate finance is not contested here. What is contested is how appraisal reports should be modified in their scope and areas for analysis, in how



final determinations of market value are demonstrated. Green buildings in all of their various forms are not currently incentivized in appropriate measure for either residential or commercial properties. By acknowledging the legitimate values inherent in environmental design and construction, and monetizing perceived benefits of green buildings where possible, the real estate industry will surely go green en masse, and the natural world may catch a break from a financially motivated human race for a change.

While still an emerging art form, appraising green buildings has taken on several forms and has meandered in many directions. Over time, the lack of uniformity in appraising and acknowledging green buildings may prove to emasculate all that we have worked for in promoting sustainable real estate. Simply defining what is considered a green building is an uncertainty. For the purpose of appraising green buildings, it makes the most sense to subjugate any green building certifications (LEED, Energy Star, Green Globes, Passive House, etc.), and instead, assign priority on the buildings' performance. What this reorganization of priorities will do is answer the question as to how much value enhancement building green has with another question, "How green is it"?

We can come to some reasonable conclusion as to how green a property is, and in turn, delineate where its value enhancements lie, by breaking down any given green building's constitution into the following areas, which can collectively comprise a Performance Based Real Property Valuation Model:

- a) Efficiencies (energy, water, and other utilities)
- b) Potential for future economic rewards (cap and trade, government incentives, financing options, tax relief)
- c) Sustainability (stewardship of natural resources, urban planning, pollution control)
- d) Functionality (low VOC, IAQ, fenestration, etc.)

On first inspection, it may be evident that these categories are to some extent analogous to LEED's major headings on the New Construction and Major Renovation green building standard, which may be so. However, the difference is, that this Performance Based Real Property Valuation Model is prioritized for certainty and quantifiability in value enhancement to the more esoteric, less quantifiable aspects of green building practices. The result is to acknowledge the values inherent in green buildings, while remaining in touch with the instruction of hard market data and the general public's collective appreciation for environmental sensitivity.



Of course, the query will soon be posed, “Why should we stretch to assign dollar values to green buildings”? My response is that the government and all of its sanctioned authorities (including Fannie Mae, HUD and Freddie Mac, who set parameters for standardized residential and commercial appraisal forms) routinely theorize, incentivize and subsidize in favor of any number of business practices over the years. So, why not for green buildings? Is this cause not noble enough?

Green buildings cut across class lines, show potential to create jobs, are eco-friendly, are timely in terms of combating the effects of The Great Recession, and they are currently under-valued in light of the distressed real properties that they are deemed comparable to in today’s market conditions. The time to seize market recovery is now, and placing appropriate value on sustainable real estate is how to do it. Here’s how it will work.

- **Efficiencies:** A baseline is determinable by comparing non-green properties for energy, water and other utility usage, and a monthly savings amount would be determined for the given green building’s utility consumption, based on the cost of utilities at the time of property appraisal inspection. Actual utility bill comparisons would be preferred, but energy modeling reports from a qualified professional would be acceptable to demonstrate efficiencies on utilities for this purpose. This monthly savings amount on utilities would be extrapolated over the remaining life of the green building; assumed to be at least 30 years (this is good enough for mortgage loan amortizations and for the IRS tax code). This accumulated savings would be discounted to present value. In so doing, we will simply and coherently quantify measurable green building efficiencies. This calculated figure could then be added to a green building’s appraised valuation.
- **Potential for Economic Rewards:** This line item is a bit trickier to determine with certainty. Therefore, whatever financial rewards are anticipated for the building’s owner or occupants would have to be discounted for time valuation, and also weighed against the likelihood of it being put into effect. On this line of logic, it is important to note that if and/or when a “Cap and Trade” system is adopted domestically it may not take effect for some period of time in the future. Furthermore, it is still uncertain that it will be enacted at all. Lastly, its terms and calculations are not as yet determined. Therefore, whatever value adjustment would be assigned to a “Cap and Trade” compliance and resulting trade value (within the domestic carbon market which is not yet established) through the use and operation of a given green building would need to be numerically offset against the aforementioned uncertainties in determining a property value enhancement. Therefore, a maximum of three percent (3%) would be permissible



as a property value enhancement in this line item for Potential for Economic Rewards. This three percent cap would be fair yet realistic; appropriately acknowledging perceived value, while remaining true to reliable data analysis.

- **Sustainability:** This line item would be capped at one percent (1%) of value enhancement. Even though everyone should care much more about the environment, with humanity and business's accumulated corruption on the earth, placing more than a one percent value adjustment on final appraised valuation for building green would be an attenuation and invitation for withdrawal of common support. This is where having a LEED, Energy Star, Green Globe or other green building certification would become relevant, if not instructive.
- **Functionality:** This line item would encourage the design and construction of structures as productive, healthy places to work and live. Examples of this line item which are more esoteric and subjective would include Indoor Air Quality (IAQ), fenestration, use of low Volatile Organic Compounds (VOC), use of hypo-allergenic construction materials, proximity to public transportation, etc. These types of building features promote health and happiness. While some building occupants may not place any value on being healthy, happy or productive within the buildings that they live or work in, it is hereby acknowledged. Therefore, the minimal one percent (1%) value enhancement cap is appropriate to recognize this sad fact; providing further commentary on human nature and its skepticism for the urgency to take better care of the earth and its denizens.

One may notice that the cost of implementing these green building features is not referenced in this line of logic. This is by design. What little allowances the current system of property valuation makes for green buildings does do in halves (by permitting a fractional value enhancement based on the cost of energy related upgrades only) or not at all (see above Potential for Economic Rewards, Sustainability and Functionality). Market efficiencies in a real estate industry context rarely, if ever, assume value based on the cost of various types of upgrades. If it did, personal taste would be included and quantified on standardized appraisal forms and accounted for in appraised valuations as matters of degree from, "delightful" to "tolerable" to "heinous." Corresponding numerical adjustments would have to be made based upon the appraiser's assessment on the property owner's personal taste in finishes. We know this invites flaws in demonstrating property value, if not laughter, therefore, we omit reference to the cost of these upgrades and focus instead on their effect. Thus, a performance based valuation system for green buildings takes hold.



Once we have this valuation model established to place additional and appropriate value on green buildings, the real estate finance infrastructure would surely respond in an accommodating direction. Furthermore, real estate market players at every level would gravitate to financing and lending opportunities as created from this change in focus towards green buildings and their associated value adjustments. Did the prior boom and bust cycle in the real estate industry closely trail financing accommodations? Of course, it did. The problem with that phenomenon was that the accommodative gap was fueled by relaxed, if not reckless, underwriting and credit standards. Isn't a preference for green building practices a more rational and healthy spirit to build a market upturn upon?

Let's give green buildings a chance.



## **GREEN ENVY DEVELOPMENT GROUP, INC.**

### **Bio – Robert M. Roth, Esq., President and Founder**

#### **Background**

Born in 1971 in the New York City metro-area, Robert M. Roth has emerged as a local leader in real estate, finance, marketing, green building and education over the course of his professional career. Admitted as an attorney to practice law in New York in 1998, and Florida in 2001, Robert has practiced real estate law and conducted business in real estate in New York City since 1997. His varied areas of experience and applied knowledge are utilized in his current endeavors in real estate and green property development every day. Robert optimizes his spare time by reading non-fiction, weight trains for physical fitness, plays acoustic guitar and writes songs, and mentors his son, Jake, whenever possible.

#### **Education**

As to formal education, his B.A. was earned in 1993 from the University of South Florida in Criminal Justice, and a J.D. in 1997 from St. John's University School of Law, and was admitted to practice law in New York in 1998 and in Florida in 2001, and remains in good standing in both states. Mr. Roth is very well read on scientific topics pertaining to climatology, paleo-climatology, climate change, geology, meteorology, genetics, anthropology, anatomy, and other recognized scientific and historical disciplines. He is always prepared to contribute intelligent and credible commentary on all of these topics as they may bear on the environment and economically viable methods of combating global warming and climate change, in a general sense.

#### **Affiliated Businesses**

Exclusive Capital Consultants, Inc. ("ECC") is an affiliated real estate business entity of Green Envy that Robert is also a principal of. ECC was founded in 2007 and is a registered mortgage broker in the states of New York, New Jersey, Connecticut and Florida. Robert is also a licensed real estate broker in New York since 2004 with Exclusive Realty Services.

#### **Educator**

Robert has also emerged as a local leader in education as an Adjunct Professor at the City University of New York at Brooklyn College since 2008. He teaches Real Estate Management and Finance, as well as a newly-launched Green Business course that he developed as the first of its kind to be offered at Brooklyn College.

