Added Financial Value of Higher-Rated & Oversubscribed Green Property Bonds

<u>OPPORTUNITY</u>. The financial value of green properties is not being fully captured, money is being thrown away. Statistically, Green Property Bonds' secured higher ratings are based on:

- 32% fewer green home defaults than conventional homes
- 30% fewer CMBS defaults from LEED buildings in pools
- 9%-12% higher green home appraised value
- 5%-15% discounted green property insurance based on Fireman's Fund's improved green property loss ratios
- 15% increased green property occupant productivity
- 6% higher LEED building rents
- 15% higher LEED building occupancy
- 16% higher LEED building appraised valuation
- 40% higher LEED retail sales
- 9% higher LEED bank branch deposits, loan accounts, and loan balance
- Underwriting Green Value Score incorporating preceding *Green Bond Business Case* data, and transparently measuring asset increased bond cash flow from the green property attributes with tangible added financial value — e.g., energy / water efficiency reducing operating costs / expenses, and commissioning and integrative process which greatly reduce building failures and operating costs beyond the Property Condition Assessment (PCA) for buildings, at a minimum increasing green property value by $1 / ft2, reducing risk and construction change orders by 90% and construction costs by 1% - 10%, with Heathrow Airport renovation saving $150 million.

<u>SOLUTION</u>. The secondary green property mortgage market is recognizing the added financial value of green properties. All labeled green bonds are worth more since they oversubscribe 3x+ due to substantial, pent-up demand causing investors to pay more with an added *"20 basis points difference between the spread of green bonds and comparable issues"* (Barclays Credit Research Sept. 18, 2015). **For building owners, oversubscription also results in cheaper cost of capital** / lower pricing on their debt, potential increased leverage, and advantageous operating costs and stability due to their building qualifying for green building bonds. To qualify, properties receive the underwriting standard Green Value Score calculated from the Energy Star or HERS Score and LEED Scorecard. Further, the added financial value of a higher credit rating is worth about 1% of the face value of the security or $5 million for a $500 million bond (recent sovereign debt experience).

Homebuilders / building owners can increase profits by selling green labeled mortgages (rather than unlabeled) for green property bonds to investment banks / investors and thus:

- Capture the added financial value of their green mortgages at bond issuance. Unlabeled green mortgages are worth less. *"It's like throwing money away"* according to JPMorgan LEED Private Equity Fund managers.
- Increase the sale price of the higher valued properties like leading builders' practice for their green home sales, and Hines with its LEED buildings as a long term profit center
- Provide homebuyers / owners with cheaper mortgage rates to boost sales / profits by providing green appraisals
- Achieve better bond "spreads" / pricing for underwriters / issuers
- Market homes / buildings as more financially valuable increasing competitive advantage, market share, brand, and share value at a well-marketed NYSE Green Property Bond Issuance Event

<u>CONCLUSION</u>. Mortgage originators are now selling their loans to investment bank underwriters and issuers. Given the added green property and bond financial value throughout the entire green bond value chain reflected by the higher rating, all parties can make more money as part of bond deals. Companies party to the bond can do this by understanding and calculating the preceding higher financial value that positively affects mortgage pricing throughout the value chain.

Note: As reflected in the higher green property rating, RMBS / CMBS ratings value real estate assets / bonds primarily by net operating income and cash flow — includes credit and operational risk, default level, valuation, rents, occupancy, expenses, and insurance of underlying mortgage assets.