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APPROVED MEETING NOTES

LEED® & ENERGY STAR® BUILDING FINANCE SUMMIT

December 6, 2005, NYC, McGraw Hill Building Penthouse

Hosted by The Durst Organization & City of New York

OBJECTIVE (FROM SUMMIT AGENDA – ATTACHED)

"This Summit's objective is to launch the development of a *Green Building Valuation Methodology* for the real estate finance community which can inform better risk-adjusted financing and investment decisions, including expected long-term rising energy costs."

"Target users for this Methodology are institutional investors, debt providers, and rating agencies including Fitch, Moodys, Standard & Poors and can serve as an overlay to existing underwriting standards. The Methodology's objective is additional underwriting criteria and standards that lead to better risk-adjusted costs of capital for all participants by appropriately attributing financial value for LEED® and ENERGY STAR® buildings and the companies that own and finance them."

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INTRODUCTION & OVERVIEW

SCOTT MULDAVIN, PRESIDENT
THE MULDAVIN COMPANY (WWW.MULDAVIN.COM)

Scott Muldavin welcomed everyone and introduced himself as a long-time real estate finance professional as well as a capitalist, coincidentally with an environmental science background.

Scott recounted how he and Mike Italiano have been talking for about a year about Scott developing a "Value Measurement Methodology" that assigns appropriate value to green buildings for the finance community. He noted that MTS was interested in his expertise especially in preparing the Risk Rating System for Standard & Poors in the early 1980's that served to launch the commercial mortgage backed securities market.

As a result of these conversations and meetings, Scott established and is heading up the independent Green Building Finance Consortium and has entities joining to help make the decisions on the nature of the Methodology, including the National Association of Realtors and the EPA. He mentioned that at the end of today's meeting he will have available the Consortium Workplan for entities interested in joining and having a say in the outcome.

Scott discussed some of the key issues facing valuation of LEED & Energy Star Buildings for the Consortium, including volatility of operating costs and benefits as most important. Lenders and investors are mainly concerned about:

- Benefit allocation
- Rising operational/energy costs and their affect on cash flow
- Valuing hard to quantify benefits.

EPA's Energy Star peer group data base is very useful to the development of a Value Measurement Methodology given their extensive database of energy costs and usage for over 18,000 buildings nationwide.

Value Studies Background: Scott highlighted some value studies background including the California/Kats' Study done primarily for public buildings which shows that for every $1 invested in green buildings there is a $10 return. Also, the Royal Institute of Chartered Surveyors recent study began with the null hypothesis that green buildings have no added value, then through literature review and case studies unequivocally identified added value. Turner's survey also shows actual added value.

The theme of the Green Building Finance Consortium is that appropriate recognition of value does involve evaluating qualitative and subjective value, then identifying what underwriting models are needed to quantify this value which is similar to how other underwriting models currently operate.

Scott said he cleared his schedule in 2006 to work on this activity. The Research Agenda of the Consortium was made available to develop the Value Measurement Methodology targeting appraisers, brokers, marketers, developers and the tenants who ultimately create green building value.

Scott then introduced Rick Fedrizzi.

RICK FEDRIZZI, CEO
US GREEN BUILDING COUNCIL (www.USGBC.org)

Rick expressed USGBC's appreciation for Scott's leadership and important work, and emphasized that the initiation of the Consortium is a strong indicator of added value of green buildings.

The market has changed from initially resisting green buildings to embracing them and a great example is the Bank of America Tower at One Bryant Park LEED Platinum Building under development in New York City. As of 2005, green buildings have become a $10 billion / year market with 500 million square feet of registered buildings.

Rick discussed the history of the USGBC which started a number of years ago with an environmental story. Today, the message has evolved to one of economic benefits, added value to people, and environmental benefits. Energy and operational savings are apparent. The market perceives a 10% increased value of green buildings. Occupant productivity is largest potential gain with health care next. Leading retailers are discussing how green design features have led to increased sales per SF but all keeping these data proprietary for competitive purposes. An important green building effect in retail is that employees are offering better customer service.

Office worker productivity has been studied since 1940s showing reduced absenteeism from green buildings. Rocky Mountain Institute's *Greening the Building & the Bottom Line* also showed added productivity as peer reviewed by USGBC a number of years ago.

Rick indicated the Finance Summit is important to forge a stronger relationship with the finance community.

USGBC Membership growth is phenomenal due to LEED launch which created a consensus definition for the market of what is a green building. Industry leaders understood the huge market opportunity and pushed forward the rating system to where we are today. Rick then described the underpinnings of the LEED rating system.

LEED is comprised of:

- Sustainable Sites
- Energy & Atmosphere
- Materials & Resources
- Indoor Air Quality (IAQ)
- Innovation

A Certified or higher building earns a great deal of market recognition as well as a plaque that owners place on their building recognizing the appropriate of the four levels of achievement. It has become clear that market preferences have taken hold—parents want their kids in green schools and patients want to be in green hospitals.

There are many LEED products:

- New Construction (NC)
- Existing Buildings (EB)
- Commercial Interiors (CI)
- Core & Shell (CS)
- Homes
- Neighborhood Development (ND)
- Healthcare
- Application Guides – Labs, Retail, Schools, etc.

Rick concluded by saying the LEED certified market is strongest in California and the Pacific Northwest. In terms of benefits, USGBC started out saying trust us, these buildings are better. This has evolved in many ways and now includes compelling case studies as well as larger aggregate studies. A study for the California Board of Regents showed 30-50 buildings with better performance data. National Geographic demonstrated an overall $24m increase in organizational value based on a $6m investment in their Washington, DC headquarters stemming from a higher building appraised value, reduced operating costs and higher third-party occupancy which led to an increased credit rating from Moodys as well as reduced interest rates on loans secured to their real estate.

Rick turned the meeting back over to Scott who said the added value of green buildings is clear; the key factor is how you translate it. Energy Star data and case study experience will help greatly.

Scott then introduced Jean Lupinacci and thanked EPA for its strong support of the Finance Summit and Valuation Methodology.

JEAN LUPINACCI, DIRECTOR
EPA ENERGY STAR (WW.EPA.GOV)

Jean said EPA's remarks are intentionally brief since there is an excellent agenda, and the Agency is hopeful the Valuation Methodology will gain from incorporating Energy Star empirical and comparative data including its national scale for buildings.

Over the years, Energy Star rated buildings have been shown to use 50% less energy than the median conventional building within their peer group. EPA has also developed estimates on corporate reputation and intangibles' benefits from Energy Star Buildings. EPA's experience with the valuation community shows that the Consortium's work can help push forward the incorporation of an Energy Star rating within the finance community.

MIKE ITALIANO, CEO
INSTITUTE FOR MARKET TRANSFORMATION TO SUSTAINABILITY (MTS)

Mike thanked Jean for her long standing support of green/Energy Star buildings. He introduced himself as a Founder/Director of USGBC and MTS CEO. He thanked Scott, Rick, all Sponsors, and especially the National Association of Realtors (NAR) for joining the Consortium. He also recognized the terrific work that Karen Cook has done on behalf of NAR including attending as their representative today and serving as the Master of Ceremonies for NAR's LEED Silver award for its DC headquarters. Mike provided MTS' background showing how this activity fits into the MTS mission and explained how this Summit evolved out of MTS' Economic Benefits Committee.

MTS is a nonprofit public charity comprised of leading environmental groups, state & local governments & companies. Its mission is to achieve 90% sustainable products market penetration by 2015. This is feasible using the marketplace because 90% of global pollution across the supply chain is attributable to the top 100 global companies.

Accordingly, MTS uses four very high leverage market drivers to do this:

- **Investor Criteria**: Helping launch a green building valuation methodology
- **Advertising**: Sustainability branding with National Public Radio's *Marketplace*
- **Education & Training**: In person/online training including with World Green Building Council
- **Consensus Standards**: Preparing launch of SMART© Sustainable Product Standards

LEED and Energy Star are included in these Standards as each of these group's objectives are intertwined—accelerating green building market penetration fosters sustainable product growth and demand. Since the building industry has the largest environmental footprint, there are many benefits to SMART© products achieved by accelerating green building market penetration; facilitating value translation to the capital markets is critical to each group's mission.

Chairman of MTS' Economic Benefits Committee is Don Reed, CFA, Principal, Ecos Corporation, the global leader in economic sustainability consulting. Don and other Committee Members have worked diligently for three years in determining the best approach to engaging the financial community including evaluating top national real estate finance experts for this task and deciding that Scott is the best. Don is an expert in sustainability valuation including intangibles, reputation, corporate goodwill and competitive advantage, and believes that Scott is the best person for this task and supports this work through the Consortium.

Mike introduced Bob Fox and congratulated him for his leading work with green buildings over the years.

BOB FOX, COOK + FOX ARCHITECTS
ARCHITECT – BANK OF AMERICA TOWER AT ONE BYRANT PARK

Bob congratulated Rick Fedrizzi, Rob Watson with the Natural Resources Defense Council, and Mike Italiano for their leadership work over the years with green buildings. Bob discussed how he also designed the Durst's Four Times Square building which was the first green building skyscraper in North America and is located next to One Bryant Park.

Bob said that a sign of the times is Don IMUS' national radio show today covered a green hospital [Hackensack General] on national radio and how there was a five page color insert in the New York Times about its green building.

He also discussed several initiatives within New York City, specifically pointing to Battery Park City which has 5M SF of LEED Gold buildings and a number of great tenants including Goldman Sachs. Developers are building there because they make more money.

Durst demanded Platinum LEED for One Bryant Park and it was the design team's mission to determine how this would happen. Given the site's proximity to transit and its location at the absolute middle of Manhattan (42^{nd} Street and 6^{th} Avenue) the site is one of the best locations in NYC. The building will link several transit stations together underground serving as a major transit hub.

One Bryant Park's crystal design form was inspired by The Crystal Palace, a classic building built in 1850 that was once located nearby this site. The building is adjacent to Four Times Square, another green building built by Durst & Bank of America and takes other forms and functions from neighboring structures.

The building's design and orientation allows for maximum light and air ventilation given the open space provided by Bryant Park. Green roofs are being installed on lower adjacent buildings for aesthetic views, reduced heat island effect and to capture water runoff. A series of underground storage tanks store and reuse this water in irrigation and as building greywater.

The building features a bamboo canopy on lowest floor levels. A Georgian theater facade was saved from the 43^{rd} Street frontage and a theater is incorporated into the overall building program. Bank of America has very large trading floor which is located over the theater.

When developing schematic drawings for the building, the design team first looks at what's free – sun, earth – and determines what can be incorporated into the structure. In the case of One Bryant Park, numerous opportunities presented themselves for the building to generate it's own power which is a significant selling point to their tenants.

Bob discussed the green features at One Bryant Park which include:

- **Transit:** The building is in city's best transit location with 1.4B riders/yr. coming through this location. The building is linking numerous stations together along the Times Square corridor via underground access.
- **CO2 Reduction:** The building consumes one 20th of CO^2 generation of comparable suburban buildings from both the construction and operation phase. Slag is being substituted for cement eliminating 56,000 tons of CO^2.
- **Local Materials:** More than 50% of materials are from within 500 miles.
- **Recycled Materials:** Glass countertops which executives preferred aesthetically over conventional granite which saved substantially on material costs.
- **Reduced Water Use:** Building captures 100% of stormwater runoff as well as condensate from steam and air conditioning, then uses the water for landscape irrigation, grey water, and cooling towers. The building saves 3 million gallons of water/yr. and accordingly, the City provided a 25% cost reduction in water fees.
- **Geothermal Energy:** The building uses 58 degree subterranean water in conjunction with a heat pump to heat and cool building.
- **Waterless Urinals:** Used with permission from the City.
- **Reduced Energy Use:** Onsite cogeneration plant using natural gas produces 70% of building's power need and is 70% efficient compared to a 23% norm for grid powered conventional buildings. At night, a turbine will make ice & during day melt it to supplement air conditioning. This avoids significant electricity peak demand charges; melting ice and cogeneration will substantially reduce electricity demand charges when cooling the building.
- **Improved Indoor Air Quality:** The design team implemented a triple-filtration system resulting in 95% particulate removal with a VOC filter, pollen and dust removal; this is close to a “clean room”.
- **Individual Temperature Controls:** Each person in the building has their own thermostat as temperature is largest occupant complaint. This is implemented using underfloor air and displaced air ventilation with floor vents using heat plume of occupants.
- **Added Daylighting:** Raised ceilings and floor-to-ceiling windows were designed in for better health and productivity benefits.
- **Commissioning:** Post-construction commissioning is a LEED prerequisite. The Durst Organization did this for all of their buildings and all are Energy Star rated as a result. This was accomplished by an independent team looking at every pump, fan and motor. Many government agencies are providing technical assistance.

Bob Fox emphasized that Bank of America’s CEO Ken Lewis wanted two things from the building: an icon & more importantly, to attract and retain the best employees. The bank is set to occupy 50% of building at the lower levels – the remaining 50% is available for lease to other tenants.

Q: Scott Muldavin – Do green features for One Bryant Park cost more?
Bob said the government is providing tax credits of $8M, and when subtracting out the co-generation features, the client is actually paying $2M less for the building than conventional construction.

Q: Scott Muldavin – What is the risk of new technology failing 5-10 years out?
Bob said there are no new systems or unproven technology; the technologies have been around for many years.

Q: Scott Muldavin – Why wouldn't the private market do this for all buildings?
Bob said that Cook + Fox only does LEED registered buildings for all clients – if the client does not want a LEED building they can look elsewhere for another design firm. It takes client leadership but isn't a hard sell. Bob Fox's clients are receptive.

Q: Scott Muldavin – What about LEED Existing Buildings (EB)? Is the industry embracing it? Bob said Cook + Fox is working on LEED EB buildings to make them CO^2 neutral including, as a candidate, 84M SF within the entire BofA portfolio. Current estimates are that payback is less than 5 yrs. BofA is studying making this commitment.

Statement: Tom Palladino with Palladino & Co. – Tom said his firm has done LEED EB with Microsoft & public agencies, but there is resistance to change. This changes the way service providers work and interact with one another and is perceived as financially risky for these service providers.

MICHAEL DEANE
TURNER CONSTRUCTION – TURNER 2005 MARKET BAROMETER

Michael said their first Market Barometer survey was published in 2004 [included within Summit Background Briefing Book] and marked Turner's commitment to sustainability. The Barometer survey is now an annual event.

Since 1995, Turner has completed 130 green building projects comprising $10B in construction value and 42M SF. The company has 100 LEED accredited professionals. Perhaps Turner's greatest leadership project is for the Yale School of Forestry which will be carbon neutral. A fair mix of public and private owners are clients. Turner made a corporate commitment to:

- Reuse construction waste for all Turner projects;
- Reuse and "green" all Turner occupied buildings;
- Provide online access to information for all LEED accredited professionals
- Meet twice a year with Turner CEO & President to better define its green role.

The first Barometer in 2004 interviewed 719 senior executives making decisions on buildings. Thirty-nine percent said their green building workload is increasing, and nearly all respondents for the 2005 Barometer said their green building work will increase. Almost everyone was aware of LEED. Virtually every respondent perceived green buildings as being better operationally with more financial value.

Turner believes from its experience that the more green buildings you build, the better you get, and costs go down. The learning curve is the "cost factor" for the industry.

Perceived obstacles are: 1) misconceptions about higher construction costs, 2) lack of awareness of benefits, and 3) first costs.

The second Barometer survey in 2005 focused on the commercial and education market and has responses from 665 executives and the results about green buildings were comparable with the 2004 survey. Respondents indicted they believe:

- Energy, operating costs over ten years are cheaper than conventional.
- Improved occupant health and well being results from green buildings
- Improved return on investments
- Construction costs are higher
- Cost of LEED documentation seen as barrier

Michael noted that Commissioning is a LEED prerequisite but not a LEED documentation / certification cost although this cost is seen as a LEED cost and factored into the fact that first costs are perceived as higher. Michael said Turner believes all buildings should do commissioning regardless of a LEED registration as the payoff is well worth it. Groups doing green buildings had higher expectations of benefits and more realistic view of burdens. The Turner Market Barometer shows the belief that there is a 2-4% cost increase in LEED except platinum which is seen as higher. However, he indicated that the more experience from the design and construction team, the lower the perception of the burden, and the cost increase moves to zero.

He stated that their experience shows the market is still growing exponentially. Turner believes education is key to eliminating misconceptions and satisfying clients and thus is conducting educational conferences throughout the US in 2006.

Michael highly recommends the October Harvard Business Review article titled "Master of the House" which details the NY Times green building headquarters from an owner's perspective.

Scott thanked Michael for this important update and valuable market information, and introduced Tom Hicks with USGBC.

TOM HICKS, VP LEED
USGBC – LEED SCORECARD

Tom emphasized that the Council listened carefully to the market including LEED documentation costs as reported by Turner's Market Barometer, and implemented streamlining that drastically reduced LEED documentation. Part of this effort is a $7M software upgrade with Adobe greatly facilitating the speed and ease of online project submissions.

Tom covered LEED Projects & Value Added attributes from 217 LEED New Construction buildings. There are 300 certified buildings. A more in depth post occupancy evaluation is being conducted with EPA.

Tom provided highlights of LEED credits achieved by percent of project numbers (not square feet):

- **Sustainable Sites:** 98% achieved the credit for public transportation. 55% received the stormwater credit. 14% of projects were built on brownfield sites. 80% implemented some form of a green roof (which includes reflective coatings).
- **Water:** 80% achieved water savings of 30% or greater. 75% achieved the credit for less water use than EPAC.
- **Energy & Atmosphere:** 87% achieve less energy usage than ASHRE guidelines. 13% have renewable onsite energy. 50% achieve commissioning beyond baseline requirements. 51% use 5% or more green power.
- **Materials:** 75% reuse construction waste. 67% achieve 10% recycled content. 66% use regional materials within 500 miles.
- **Indoor Air Quality:** Tom emphasized this as an important area since humans spend roughly 90% of their time indoors. 99% of projects achieve low VOC credits. 75% achieve daylighting and views credit. 69% have construction IAQ plan.

Post Occupancy Joint Study with EPA Energy Star: Denver Place was highlighted which is, a 300,000 SF LEED EB Gold and Energy Star Certified building. A total of nine buildings are being evaluated now with 30 by June 2006 with energy use as the key issue. Energy Star is based on actual energy performance whereas LEED new construction credits have been awarded based on projected modeled performance. CalEPA Platinum LEED & Energy Star Building showed $12M increased value from reduced operating costs (using a 7% cap rate) compared to other comparable downtown Sacramento commercial properties (data provided by Thomas Properties).

Scott thanked Tom very much. There was a lunch break and he then introduced Dan Winters with Evolution Partners.

DAN WINTERS, MANAGING PRINCIPAL
EVOLUTION PARTNERS

PRIVATE EQUITY PANEL
ROGER KRAGE, Gerding/Edlen Development
GARY STEVENS, Landmark Partners

Dan introduced the panelists and gave background on their firms. Gerding / Edlen is a leading development firm in Portland, OR; Roger Krage takes the lead in securing financing. Landmark Partners is a large private equity firm based in the New York Metro area; Gary Stevens is a partner with the firm and has extensive investment and development experience including senior executive positions with the Carlysle Group and JE Robert Company.
Q: Scott Muldavin: How many in the audience approach buildings from equity side/ownership? About 15% responded that they do.

Dan Winters led off by asking Roger to explain what benefits Gerding identifies from green buildings and how this affects profitability.
Roger said he believes that sustainable developers of certified green buildings should receive credit enhancement. Buildings reducing pollution attract tenants. Gerding was initially asked to develop green buildings by Pacific Gas & Electric. Since then, Gerding only does LEED certified buildings. Gerding's LEED Platinum residential/office complex in LA will be its largest. It is also developing a LEED Platinum historic art center. It successfully developed the certified green project the Brewery Block which was discussed at length.

Roger said that their project's green building benefits are "lifestyle multi-use" that address tenant needs for transit and retail proximity because they want to live and work in the CBD with these amenities. His comments focused on their creation of a "sense of place" with their projects. Solar also added value.

It was hard to get institutional markets to become familiar with green attributes. High net worth individuals contributed funds. Green attributes were not a factor in achieving investor interest.

Audience Statement by Leanne Tobias, Malachite, LLC:
Leanne said she underwrote Phase II of this project on behalf of the Investment Committee of its owner when she worked for the Multi Employer Property Trust Pension Fund in 2000. She stated the location, design, market conditions and project economics were the deciding investment factors, as well as the mixed use urban environment/renovation aspects. She said that the underwriting from an equity perspective did not identify green as a factor – at the time no one cared. At the same time, the green features were not an impediment to investing in the project because the budget was within the market envelope. In addition, when the project was completed, the green features contributed to leasing performance that surpassed market norms then prevailing in Portland, despite the significant market slowdown that occurred prior to project delivery.

Roger Krage, Gerding / Edlen: Roger replied that for Gerding's more recent Brewery Block 2 in Portland, green features were an amenity that helped leasing and added to the appeal of the project. It attracts high-end tenants interested in what their space says about them and the project has achieved a rental premium over proforma.

Q: Michael Deane: What were costs of Platinum? Roger said that platinum results in marginal increases……only in design and engineering costs.

Q: Scott Muldavin: What project financial history does lending/equity need? Roger said they underwrote the building like any other.

Leanne Tobias – Being over cost isn't a problem if rental profile compensates. Energy costs didn't determine underwriting but is helpful. Gerding markets lifestyle & green in LA urban projects. Many tenants like the amenities. Lower utility costs are attractive to tenants. Leaseup time is less but location, lifestyle is most important, while operating costs are less so.

Q: Drew Ades with Fannie Mae: What is Gerding / Edlen's financing structure? Roger said it is 85-90% debt leverage and 10-15% equity financing. Brewery Blocks green project was refinanced at higher value with distribution to investors. Gerding has more green building experience now and can document value.

Q: Brandon Mitchell, NYC Comptroller: Have you approached pension funds? Roger said Gerding uses them as co-investors with select projects.

Dan Winters: Dan asked Gary Stevens to define the factors that he might underwrite in making a good green real estate investment?
Gary said that from a macro green perspective, moving back into the City has dramatic environmental benefits. However, when you ask how you quantify these benefits as an investor, this is tougher……especially beyond energy.

Gary agrees with Turner's conclusions that any increased costs for green building is paying for the learning curve. As to increased productivity, Gary believes the value is real but hard to quantify and as market leaders we differentiate ourselves for greater social benefit whether or not it can be accurately measured. Faster approvals for green projects may help. Investors won't put quantified productivity gains into underwriting even though it's real.

Gary used the example of a school where his wife is a Director on the board – Sidwell Friends School in Maryland which is seeking LEED Platinum. The important questions are: What is cost premium? How do we measure payback? Gary said it was interesting to note that due to these higher value intangibles, Charitable Foundations are putting in more money, parents are enthusiastic, and the "faculty is excited off the charts." There is better productivity and value, but hard to quantify.

Scott Muldavin: Scott interjected and discussed ways to value productivity within the Methodology by identifying what attributes lead to it. You can then scale 20 things that contribute to occupant productivity for example, using a 1-5 rating system. This could be the basis behind the thinking of valuing productivity and other green-based intangibles.

Gary said it is harder to value how a lender would price a loan cheaper based on green benefits. Tim Lowe, an appraiser who is CEO of Waronzof said that productivity gains likely leads to added value from greater occupancy rates and tenant retention. Retention creates value. Tenants will pay more for these green attributes and this can be measured. Gary said he agrees and the challenges are that most real estate choices are subjective, and the difficulty of quantifying subjective criteria during underwriting.

It was mentioned that GSA is doing Workplace 2020 which looks at occupant satisfaction using LEED as a guide.

Scott Muldavin: Risk management is biggest factor for valuation including increased energy costs. Reducing volatility of energy costs through green and Energy Star is a huge benefit. Other regulatory risks are real and conventional buildings could be devalued with increased energy costs and other factors.

Scott thanked Dan, Roger and Gary for their very helpful contributions.

SCOTT MULDAVIN, PRESIDENT
THE MULDAVIN COMPANY

DEBT PANEL
- **NORMAN SELLARS, Citizens Bank of Canada**
- **JACQUES KHOURI, Vancity Enterprises**
- **BILL GREEN, Wachovia Securities**
- **DREW ADES, Fannie Mae**

Norman said that energy costs are hard to predict but everyone believes they will continue trending upward over time; there was consensus agreement with this view. Norman works on mortgage financing.

Jacques is with Vancity Enterprises and is the real estate developer for the bank charged with a triple bottom line focus.

Bill Green of Wachovia said he is responsible for $60B of debt & equity and is intrigued but lukewarm about added green building value for the securities market because it is always a cost benefit analysis & payback will be sucked out by financiers.

Drew Ades is in the multifamily part of Fannie Mae with the largest portfolio of multifamily loans in the market.

Scott Muldavin: Is underwriting different for green buildings? Norman said the Bank's ethical responsibility requires an arms length transaction. Citizens Bank is committed to building green philosophically. Directors encourage green projects but the underwriting criteria are no different than conventional building and there is no pricing or risk benefit.

Scott Muldavin: Norman, You've bought into the concept.

Bill Green: Believes what is said by Norman but the opposite is true for debt. It is more likely that Wachovia would lend to inefficient buildings knowing there is potential for operating savings.

Scott Muldavin: Subordinated note buyers can make more money and could take less risk. Bill responded saying in the long run, yes, but in the short run, no, we get our profit from how the rating agencies ultimately rate the security and the underlying collateral.

Leanne Tobias: Are mortgage lenders looking for better product? Bill said that portfolio lenders are declining as more and more product becomes securitized. With rising interest rates, are green buildings more valuable? Not sure……a good building is a good building.

Scott Muldavin: What about in a down real estate market coupled with energy costs going up? Bill believes that operating costs including energy will be passed through to tenants and thus not a factor.

Drew Ades: The lender profit margins are not high enough to provide more pricing benefits to the borrower. If you can figure out long-term benefits you can get more loan dollars. Bill responded saying that long-term leases in place is a disincentive to spend money for improvements including green attributes as they can't be passed through. Gross leases could provide better incentives. Net leases are a disincentive. But the securities market has little incentive for added value from green buildings.

Chris Smith, USGBC: What if tenants move to green buildings to save operating costs among other reasons? Bill said this will work over the long term but not over the short term which is important for securities. He also noted the Rating Agencies don't track green buildings.

Norman Sellers: If appraisers recognize value, then the market will reflect added value.

Jacques Khouri: At Vancity's Dockside LEED Building announcement launch – 75% of units sold out immediately at record prices. Vancity has asked the question, "are they buying green or a 'whole basket of goods?'"

Bill Green: We're at a record low for building starts. When are you going to spend? when you have low occupied rates. He indicated that given his focus as a conduit lender who securitizes loans as opposed to holding them on their books, one basis point advantage in the market would get him to pay attention.

Norman Sellers: Competition for product is intense and demand is more for green.

Scott Muldavin: Lenders will get pushed by borrowers. How do we understand it? We know what LEED means and its effect on the probability of energy increases. This could generate a niche market for a service provider.

Bill Green: I'm not saying we'll do it because we have better factors. In general, the future belongs to equity and the past belongs to debt. One outlier property could kill the structure.

Scott Muldavin: What if a new mezzanine structure was set up?

Bill Green: We're not investing based on altruism.

Scott Muldavin: The benefits are more than altruistic.

Drew: At Fannie Mae we ask ourselves internally, "Are there pricing benefits for less risk?" The reason the CMBS market has grown is that the end investors don't want to know about property – they seek certainty of cash flow. It's higher up in the capital structure where there is a higher return. The green market will get there, be standardized and there may ultimately be a risk of not getting a loan if the building is not green.

Bill Green: Bill said that an extension of the engineering scope during due diligence could require green, but Bill personally won't force it unless there is an economic benefit. Bill believes new properties will be more likely to go green, but new technology is not lasting. The replacement cost will suck out any initial green advantage.

Mike Italiano: Mike asked Tom Hicks if LEED covers this by requiring in LEED EB that there be a regular recertification. Tom said this is a requirement for LEED EB every five years, but not for LEED NC.

Tim Lowe, Waronzof: One of the problems is that construction risks are mis-priced for non green; there is too low a return. Pricing risk of not being green may be an approach.

Scott Muldavin: Valuation approaches could include capitalization of net operating income, sales approach, and cost approach. This is the area where obsolescence occurs.

Bill Green said that all things being equal, the whole market will see value before he'll consider [green buildings].

Scott thanked the panelists for their time, effort, great ideas, and sharing their important knowledge and experience.

MEETING WRAP UP

SCOTT MULDAVIN

GREEN BUILDING FINANCE CONSORTIUM
Appropriate LEED® & ENERGY STAR® Building Value Recognition

Scott said the Consortium work is anticipated to take 6-12 months. The goal is to apply the Methodology for all market segments – owner, investor, and developer.

The Consortium will look at life cycle costing, Don Reed's important valuation of intangibles, RICS study including who bears the costs of green building and who gains the short and long term benefits.

He posed the question of what is the maximum penetration of green buildings? Pensions will be asked to participate as they are at the front end as early adopter investors including CalPERS.

Scott thanked everyone for participating and concluded the meeting.