

GREEN BUILDING FINANCE SUMMIT

BRIEFING BOOK

December 6, 2005



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GREEN BUILDING FINANCE SUMMIT

BACKGROUND BRIEFING BOOK

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EXECUTIVE SUMMARY

CONSORTIUM BRIEFING BOOK

BACKGROUND INFORMATION FOR DECEMBER 6, 2005 MEETING

The dialogue surrounding environmentally responsible and energy efficient building has increased substantially given volatile energy costs and environmental changes stemming from global warming. Public and private sectors alike in countries throughout the world have come together to develop and implement tactical strategies and action plans to combat these macro trends. Leading companies have embraced the opportunity to get ahead of the curve and many have discovered that implementing green attributes can be both more profitable and provide a platform to better manage risk.

It is much easier to quantify opportunities and costs surrounding volatile energy prices as the oil/gas/coal that serve as our main energy sources are each a natural resource with pricing subject to the rigors of market supply and demand. Environmental impacts are not so clearly delineated; while it has become clear that climate change is not just an environmental problem but an equally large business problem, quantifying these opportunities and costs is more challenging as some costs are incurred immediately but the benefits are not only deferred, but also thinly spread to others.

There is significant embedded value to high-performance design techniques. Reduced exposure to the downside of volatile energy prices, CO2 reductions from stemming from both the asset itself as well as the energy used by occupants in their commute, higher indoor air quality to tenants given the use of low-VOC materials, lower maintenance given upfront attention to life-cycle costs during the design phase and material specification, lower risk of lawsuits, and overall better building design given an integrated design and development approach are just a few of the far-reaching benefits.

To the extent there is value in such things as energy efficient design, green design techniques, low VOC materials, efficient technologies, and other design and construction strategies, the challenge then becomes to understand the various components, measure it, and translate them into understandable metrics such that financial markets can recognize the current and future value be it from the perspective of a tenant, lender or equity investor.

The briefing book contains industry background information from the EPA's ENERGY STAR[®] program, case studies from the US Green Building Council along with background on the various LEED scorecards, recent articles from The Economist and CFO Magazine, a summary from Goldman Sachs' recent conference on the Top 10 Financial Risks to the Global Economy, articles and graphs on energy prices, Turner Construction's 2004 Market Barometer (which will be updated by Michael Deane during the morning session), and other key topical matter.

This executive summary is provided to serve as a guide to this reference material. Please use the following abstracts as an aid when reviewing this material.

Thank you for your participation in the Summit – we look forward to your continued engagement as this project progresses.

Section I

Meeting agenda for the Green Building Finance Summit scheduled for December 6, 2005.

Section II

Articles on “Need for a Green Building Valuation Methodology” provide an overview of the Institute for Market Transformation to Sustainability's (MTS) efforts to propel green building mortgage-backed securities (GBMBS) and its draft economic benefits standard.

According to MTS' studies, GBMBS are expected to grow exponentially in the market due to higher credit ratings and the overall economic benefits of green buildings. As green building attributes become monetized via an increase in relative value, green building standards will become the benchmark for all buildings.

Section III

The Turner Construction Market Barometer summarizes the findings of Turner Construction Company's first survey about executive views and experiences with green buildings. Over 700 U.S. executives participated in the survey which covered topics such as operating costs and benefits, trends in green building construction, obstacles to green building activity, and the role of organizations in green building construction.

The Market Barometer found that over 90% of executives expect an increase in the number of green buildings, with most activity in educational and public facilities. More than half of the executives consider energy efficiency as the most important characteristic of a green building, with more than 90% ranking it among the top three qualities. Even though survey participants agreed that green buildings carry slightly higher construction costs, they recognize that these investments were paid back through lower operating costs and increased revenues.

Section IV

This section provides an overview of the US Green Building Council's various Leadership in Energy & Environmental Design (LEED™) rating systems as well as case studies on various projects where they have been implemented.

The executive summary by Gregory Kats' reviews his major study for the California Sustainable Task Force representing 40+ state agencies examines green building costs benefits and cites examples from different state governments. The study compared LEED™ rated buildings with conventional buildings in California and concludes that green buildings provide financial benefits that conventional buildings do not such as lower energy consumption, waste, and water costs, lower environmental and emissions costs, lower operational and maintenance costs, and increased productivity and health. Kats' article also explores the average premium for building green which stands at slightly less than 2% at the time of the study which has since fallen to close to zero as reported by numerous developers and practitioners at the 2005 Greenbuild trade show held in November 2005.

In addition, this section contains checklists different for the various LEED™ rating systems including Commercial Interiors (CI), Existing Buildings (EB), and New Construction (NC). Also included are case studies for several certified buildings including financial metrics, design strategies and their positive impacts on organizations and environments.

Section V

ENERGY STAR® is a dynamic government/industry partnership that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

In 1992 the US Environmental Protection Agency (EPA) introduced ENERGY STAR® as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions. The ENERGY STAR® label is now on major appliances, office equipment, lighting, home electronics, and more. EPA has also extended the label to cover new homes and commercial and industrial buildings.

Through partnerships with more than 8,000 private and public sector organizations, ENERGY STAR® delivers technical information and tools that organizations and consumers need to choose energy-efficient solutions and best management practices. ENERGY STAR® has successfully delivered energy and cost savings across the country, saving businesses, organizations, and consumers about \$10 billion in 2004 alone. Over the past decade, ENERGY STAR® has been a driving force behind the more widespread use of such technological innovations as LED traffic lights, efficient fluorescent lighting, power management systems for office equipment, and low standby energy use.

The spring 2005 edition of the EPA ENERGY STAR® “Off the Charts” e-newsletter features articles on energy trends and management as well as the 2005 ENERGY STAR® Award Winners. One such article, “On Top of a Goldmine,” examines how an increasing number of investors are finding that energy management practices directly affect the financial performance of real estate assets with a 10% energy savings equal to a 3% rent increase and a 5% increase in NOI.

Also in this section is a case study published by Trane highlighting the Centex Building in Dallas, TX as an excellent example of a highly acclaimed ENERGY STAR® building that scored 99 of a possible 100 points on the ENERGY STAR® scale.

Section VI

This section contains major financial background articles from CFO Magazine, The Economist and Fortune, as well as a CEO briefing on social and environmental effects on equity pricing. These articles address issues such as tracking the triple bottom line of a company, big companies experiences with green buildings, environmental risk reporting under GAAP, and social and environmental approaches to asset management.

As discussed in CFO’s “Greener Buildings, ‘Greener’ Bottom Line”, large entities like Toyota Motor Sales, Wal-Mart, and the National Geographic Society have already illustrated the financial success of green buildings. The Swiss Re Tower in London, featured in the Economist’s “The Rise of the Green Building”, offers another example of the financial benefits of green building design.

The concept of socially responsible investors (SRIs), institutional investors and mutual fund groups that use social and environmental criteria to screen their portfolios is introduced by CFO’s “The Greening of GAAP”, while “How Green Is My Company?” concludes that triple bottom line – economic, environmental, and social – is becoming the standard for many stakeholders.

The U.N. Environment Programme’s “CEO Briefing” discusses a study which aimed to determine how to increase environmental and social asset management from brokerage house analysts and policy-makers. The study indicated this type of asset management is growing, especially in the European Union, and is

being pushed by powerful institutional investors seeking to mandate and standardize the inclusion of social and environmental criteria in financial frameworks.

Fortune's "Managing Beyond the Bottom Line" and "Responsibility Isn't a Blame Game" discover that more companies are making an effort to do business in a socially and environmentally responsible way. As a result, these companies are finding that as their 'global accountability' ratings grow, more stakeholders are being attracted.

Section VII

Current events are a major force for predicting investor and market trends. BusinessWeek's "It's Easier Being Green" captures how Hurricane Katrina caused anxiety among the general public concerning energy and gas prices which translated into a renewed interest in energy conservation. CBS's "Venture Capitalists Hot On Energy" looks at another factor in energy trends: the shift to alternative energy investments in the wake of rising energy bills and gas prices.

For other current event articles, please visit www.EvolutionPartners.com to review the Industry News section on the home page.

Section VIII

Goldman Sachs held a conference in September 2005 entitled "Goldman Sachs Global Markets Institute: Top Risks to the Global Economy". This section discusses a poll taken of economists around the world about their outlook on the global economy and the top 10 risks. Among the findings, world oil supply and terrorism are the top two threats to performance, both in the short and long-term. Each of the Top 10 risks have a separate discussion within the article with world oil supply (#2) and environmental accords(#7) being most pertinent to this Summit. The report also finds that differences of opinion exist between U.S. and non-U.S. economists on issues such as where economic growth will occur and the economic significance of public health issues.

Section IX

This section focuses on current events surrounding oil supply and energy price trends. A copy of Evolution Partners' past presentation to the EPA show that prices for major energy resources including oil, refined gasoline, natural gas, and coal have increased dramatically in the past year. Included is also a brief example of the proposed Methodology and it's effects on appraised value and the corresponding availability of debt proceeds.

In early 2003, the US Senate's Committee of Energy and Natural Resources heard testimony from energy experts including Matthew Simmons, an energy investment banker and noted author. He testified and demonstrated actual proof that the world's capacity to pump and produce oil has already peaked, which will cause prices to soar as energy consumption continues to rise.

Two other articles – CNN's "Oil: Is the End at Hand?", and USA Today's "Debate Brews: Has Oil Production Peaked?" – discuss Simmons' studies and examine what experts believe the future will hold for energy costs as the natural resource supply is depleted.

Section X

The Packard Foundation study is an oft-cited and comprehensive study completed in October 2002 that compares the design and construction costs for a 90,000 SF suburban office building in the San Francisco MSA at various levels of LEED certification. The study breaks down construction costs by line item and also addresses energy performance based on each design level. The last two pages of the study also delve into external costs to society including CO2 emissions and other air pollutants.

PNC Bank's Firstside Center in Pittsburgh, PA is one of the first LEED certified buildings. PNC's 647,000 SF facility houses 1,800 staff people – the company experienced a significant decrease in employee turnover and absenteeism following the move to this facility.

Section IX

The Royal Institute of Chartered Surveyors (RICS) is the world's largest real estate profession with over 117,000 members in 123 countries. A presentation given at Greenbuild in Atlanta on November 9, 2005 covered a green building valuation study currently underway by RICS. They identified a gap in value attribution and identified several opportunities including addressing how value is incorporated into rating systems and how the value could substantially exceed the cost savings as cost approaches tend to harm the business case and do not address external costs.

The article *Lending Incentives For Green Development* lays out numerous critical factors and applications to the focus of the Green Building Finance Consortium. The paper proposes guidance on how to target and structure loan capital for various improvements that fall under the "green" label. Focus is placed on permanent lending practices that reward additional capital costs incurred that deliver marginal operational cost gains in energy and water consumption as well as roofing and other material. Various incentives can come into play at critical points in the development process that lead to a better quality building that performs at a higher level throughout its life cycle.

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LEED™ & ENERGY STAR® BUILDING FINANCE SUMMIT

Date: Tuesday December 6, 2005
9:30 am to 3:00 pm

Place: McGraw Hill Building – Penthouse Suite
330 West 42nd Street, 33rd Floor
New York City

Hosts: Durst Organization
City of New York

Increased interest in green buildings and greater energy efficiency creates new market opportunities for real estate investors and financiers. For a healthy green and energy efficient investment market to flourish, appropriate financial risk management mechanisms are necessary.

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.

AGENDA

9:30am – 10:00am

WELCOME – INTRODUCTIONS & OVERVIEW

Scott Muldavin, The Muldavin Company
Rick Fedrizzi, CEO – US Green Building Council
Kathleen Hogan, Director – EPA Climate Protection Partnership Division

The Leadership of the leading programs defining green and energy efficient buildings will discuss rationale and value of developing sound underwriting standards in order to stimulate the marketplace.

10:00am – Noon

MARKET OPPORTUNITIES AND CHALLENGES:

WHAT WE KNOW AND DON'T KNOW ABOUT THE BENEFITS OF LEED™ AND EPA ENERGY STAR® BUILDINGS

FACILITATOR: Mike Italiano, CEO – MTS / USGBC Founder and Director

10:00 – 10:30am

CASE STUDY PRESENTATION – BANK AMERICA TOWER AT ONE BRYANT PARK

Douglas Durst, Durst Organization

Bank America Tower at One Bryant Park is Durst Development's latest green project targeting a LEED Platinum rating and follows upon the firm's success of Four Times Square.

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City of Dallas

City of Santa Monica

City of Denver

City of Oakland

City of San Francisco

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10:30am – 10:45am

TURNER CONSTRUCTION GREEN BUILDING MARKET BAROMETER 2005 UPDATE

Michael Deane, Turner Construction

Turner Construction's 2004 study on green building perceptions and issues surveyed over 700 US executives involved as either an owner, owner-occupant, developer, consultant, designer or builder – this session will provide 2005 updated findings.

Key findings from 2004 respondents included lower operating costs (75%), greater health and well being (91%), belief of higher building values (84%), and higher return on investment (75%).

10:45am – 11:00am

USGBC REGISTERED PROJECT SCORECARD BREAKDOWN

Tom Hicks, VP for LEED™ – US Green Building Council

On average, 50% of LEED registered buildings are planning a 20% to 50% decrease in energy use above ASHRAE, 50% are implementing strategies that reduce water usage by 30% or more, and 60% are providing daylight and views for up to 90% of building occupants. Also, over 80% of buildings are incorporating low-VOC materials which significantly impacts indoor air quality.

Tom will cover these and other important value-adding attributes.

11:00am – 11:45am

GROUP AUDIENCE DISCUSSION

OBJECTIVE: To frame the background for the consortium's Methodology development by examining the empirical evidence of the financial benefits as well as the experiences of the people in the room.

TOPICS:

- ENERGY STAR® / USGBC LEED™ empirical evidence of enhanced financial value
- Strengths of current knowledge as a basis for a standardized methodology
- Availability of national rent and sales comparables comparing them to "market"
- Evidence of reduced risk in future income streams
- Potential for rising energy costs to greatly increase the competitive advantage of energy efficient buildings
- Participant experiences

11:45am – 12:45pm

NETWORKING LUNCH

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Canada Green Building Council

Citizens Bank of Canada

USGBC NYC Chapter

New York City Council

City of Seattle

City of Chicago

City of Dallas

City of Santa Monica

City of Denver

City of Oakland

City of San Francisco

BOMA Energy Efficiency Program

Philips

Forbo Flooring

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12:45pm – 1:30pm

RAISING EQUITY FOR GREEN BUILDINGS: STATE OF THE MARKET

FACILITATOR: Dan Winters, Managing Principal – Evolution Partners

Gary Stevens, Partner – Landmark Partners
Douglas Durst, CEO – Durst Development
Dan Emmett, CEO – Douglas Emmett & Co.
Kevin Fitzpatrick, President – AIG Global Real Estate Investment Corp.
Roger Krage, Principal/General Counsel – Gerding / Edlen Development
Diana Laing, CFO – Thomas Properties REIT

OBJECTIVE: To determine the information and decision-making mechanisms involved in the evaluation of LEED™ and ENERGY STAR® buildings as potential equity investments and to identify opportunities for more accurate valuation of these buildings.

TOPICS:

- Identifying investment decision dynamics
- Identifying information needed to support these decisions
- Enhancing building value through specific design / performance attributes
- Role of ENERGY STAR® and LEED™ building features in valuation
- Participants' insight including investor perspectives, specific experiences, and financial outcomes.

1:30pm – 2:15pm

GREEN BUILDING DEBT: STATE OF THE MARKET

FACILITATOR: Scott Muldavin, The Muldavin Companies

Drew Ades, VP – Fannie Mae
Bill Green, CMBS Portfolio Manager – Wachovia Securities
Jacques Khouri, CEO – Vancity Enterprises
John Saclarides, SVP – Bank of America *(invited)*
Mary Wenzel, VP – Wells Fargo Bank

OBJECTIVE: Identify the concerns and issues confronting lenders and borrowers in the Green Building market that could be addressed by the Methodology including financial barriers and opportunities when raising debt.

TOPICS:

- Challenges in the current underwriting standards such as market rent comparables, historical operational costs for projected energy performance, reserve for replacement criteria, renewal probability, TI allowances, and overall benchmarking
- Specific underwriting criteria amenable to upward/downward adjustment
- Opportunities for interpreting qualitative factors into quantitative standards
- Participant experiences including lender and borrower perspectives

2:15pm – 2:45pm

GROUP AUDIENCE DISCUSSION

2:45 – 3:00pm

GREEN BUILDING FINANCE CONSORTIUM

APPROPRIATE LEED™ AND ENERGY STAR® BUILDING VALUE RECOGNITION

Scott Muldavin, The Muldavin Company

OBJECTIVE: Discuss planned research and development of the Methodology

- Summarize major discussion topics explored during today's Summit
- Discuss next steps