



MBA's COMMERCIAL REAL ESTATE FINANCE/MULTIFAMILY  
HOUSING CONVENTION & EXPO  
Walt Disney World Swan And Dolphin, Orlando, Fla.

# Green Buildings: Today's Fad or Tomorrow's Necessity?

Monday, February 4

2:00 – 3:15 pm

*Products and Markets Track Sessions Sponsored by*



# Green Buildings: Today's Fad or Tomorrow's Necessity?



Moderator:

**Charles L. Perry, Jr.**, Principal, EAG

Speakers:

**Jeff Armstrong**, Senior Vice President, Commercial Mortgage Origination  
Wells Fargo Commercial Mortgage

**David J. Dybdahl, CPCU, ARM, MBA**, President, American Risk  
Management Resources Network, LLC

**Marc Heisterkamp**, Manager, LEED®,  
Corporate/Investment Real Estate Sector, US Green Building Council

**Edward V. McNeill**, Senior Vice President Operations  
Turner Construction Company

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**MBA CREF 2008  
February 4, 2008**

**Marc Heisterkamp**

**U.S. Green Building Council**



**USGBC is a coalition of the country's foremost leaders from across the building industry. We promote buildings that are:**

- 1. Environmentally Responsible**
- 2. Economically Profitable**
- 3. Healthy Places to Live and Work**





# Leadership in Energy and Environmental Design

A leading-edge system  
for certifying the  
greenest performing  
buildings in the world

LEED® Facts	
Building size 12,500 square ft	
Type of building	
LEED for Core & Shell Development Certification awarded July 27, 2006	
<b>Platinum</b>	
Sustainable Sites	13/15
Water Efficiency	5/5
Energy & Atmosphere	12/15
Materials & Resources	6/9
Indoor Environmental Quality	10/13
Innovation & Design	3/5
*Out of a possible 62 points	

LEED® Facts	
Building size 12,500 square ft	
Type of building	
LEED for Core & Shell Development Certification awarded July 27, 2006	
<b>49*</b>	
Sustainable Sites	13/15
Water Efficiency	5/5
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# What is a Green Building?



# Water Efficiency (WE)

Yes ? No

0 0 0

## Water Efficiency

10 Points

Y

Prereq 1 **Minimum Indoor Plumbing Fixture and Fitting Efficiency** Required

Credit 1 **Water Performance Measurement** 2


1.1 Whole building metering 1

1.2 Submetering 1

Credit 2 **Additional Indoor Plumbing Fixture and Fitting Efficiency** 3


2.1 10% 1

2.2 20% 1

2.3 30% 1


Credit 3 **Water Efficient Landscaping** 3

3.1 Reduce Potable Water Use by 50% 1

3.2 Reduce Potable Water Use by 75% 1

3.3 Reduce Potable Water Use by 100% 1


Credit 4 **Cooling Tower Water Management** 2

4.1 Chemical Management 1

4.2 Non-Potable Water Source Use 1

Yes ? No

0 0 0

## Energy & Atmosphere

30 Points

Y

Prereq 1 **Energy Efficiency Best Management Practices - Planning, Documentation, and Opportunity Assessment** Required

Y

Prereq 2 **Minimum Energy Efficiency Performance** Required

Y

Prereq 3 **Refrigerant Management - Ozone Protection** Required

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Credit 1 **Optimize Energy Efficiency Performance** 15

# Consensus-Based Standards

## USGBC has four levels of LEED:



**ENERGY  
USE**

**CARBON  
EMISSIONS**

**WATER  
USE**

**SOLID  
WASTE**

**30-50%**

**35%**

**40%**

**70%**

**Average Savings of Green Buildings**



**“Lower energy costs, improved indoor quality, reduced absenteeism, increased productivity -- green buildings, outperform traditional buildings on many levels. By investing in state-of-the-art electrical, plumbing, and roof systems, green building owners experience fewer incidents of risk and loss.**

**Fireman’s Fund Insurance**





Non-LEED Class A Office

**\$29/ft**

LEED Class A Office

**\$39/ft**



LEED Class A Office

**7.4% Vacancy**

Non-LEED Class A Office

**11.6%  
Vacancy**



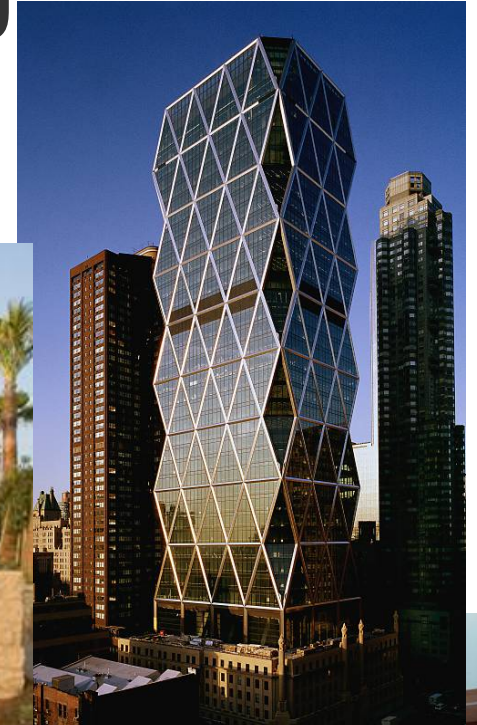
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# What is Green Building Construction?



# Green Provides Benefits for All Industry Stakeholders

- The Architect may promote **environmental measures** .... because *“It’s the right thing to do”*.
- The Facilities Manager will like inherent **durability & maintenance advantages**.
- The Owner may look strictly at **bottom-line financial** benefits of green.
- The Mortgage Banker may promote.... “\_\_\_\_\_.”

# Three Keys for Green Success

## 1. Experience

- The Antidote for higher 1<sup>st</sup> costs in green building is EXPERIENCE.

## 2. Integrated Design & Collaboration

- Requires early involvement of All critical team members.

## 3. Measure It

- Set-up the LEED score card & responsibility matrix for achieving certification.

# **Construction is about Juggling the Big 3**

**Cost – Schedule – Quality**

**Sometimes, even with best  
intentions...you only get 2 out of 3.**

**Green provides the process to get all 3!**

**Now what are the benefits?**



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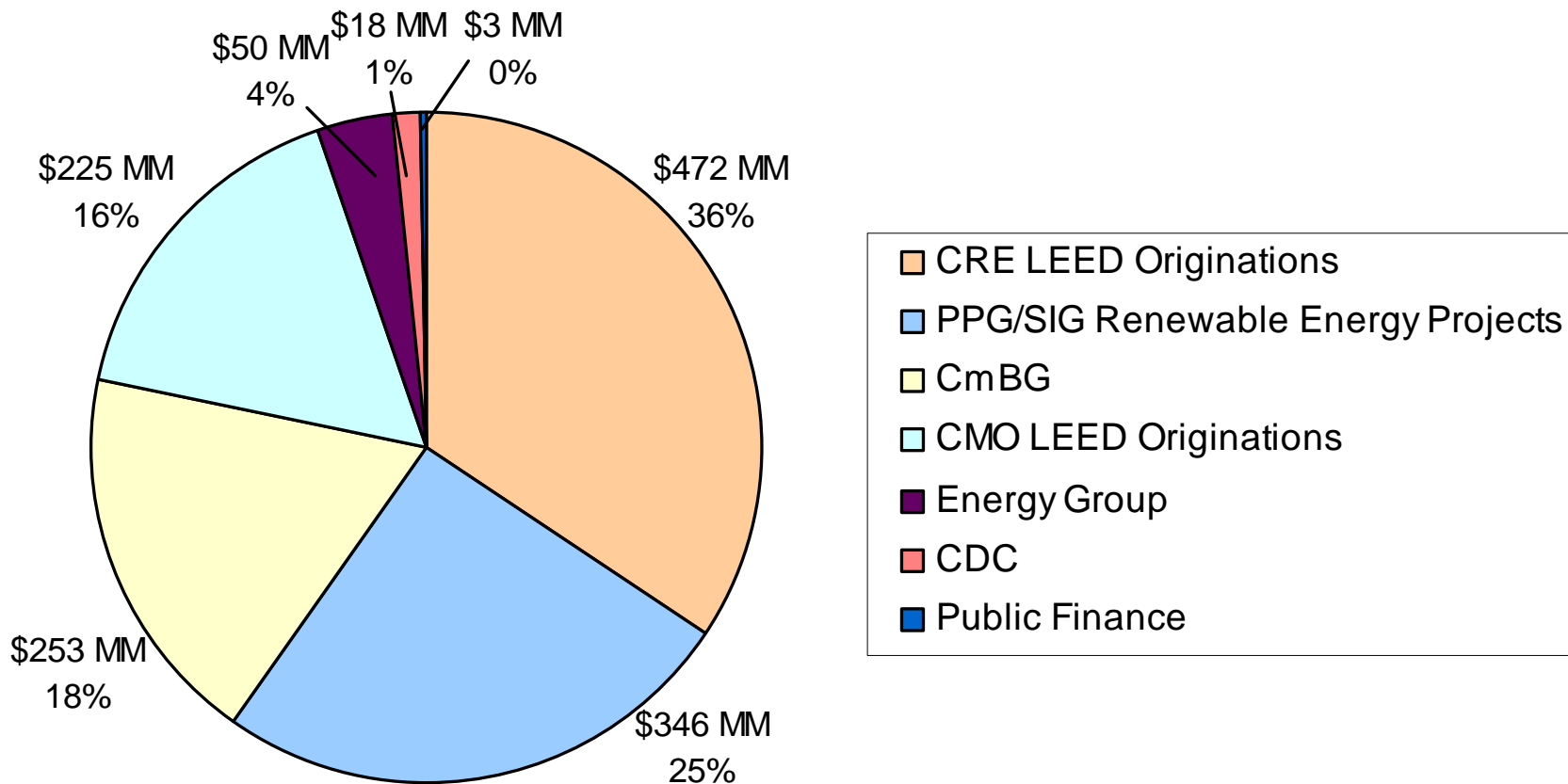
**Jeff Armstrong, Senior Vice President  
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## Wells Fargo Environmental Finance Loans/Investments

Total = \$1.367 billion (1/07 - 12/07)





## • Wells Fargo Bank's 2007 Commercial Real Estate LEED Originations

Product Type	Location	Originated Loan Amt
Class A office	Loveland, CO	\$10,831,000
Mid-rise office	Austin, TX	\$42,670,000
Hi-rise Office	Washington, DC	\$123,000,000
Hi-rise Office	Chicago, IL	\$19,000,000
Hi-rise Office	New York, NY	\$47,000,000
Hi-rise Office	Washington, DC	\$225,000,000
Office	Phoenix, AZ	\$8,718,597
Mid-rise Office	Las Vegas, NV	\$15,175,000
Hi-rise Office	Charlotte, NC	\$95,000,000
Condos (affordable)	San Francisco, CA	\$25,500,000
Hi-rise Office	Milwaukee, WI	\$4,500,000
Office/industrial	San Marcos, CA	\$13,500,000
Office	Washington, DC	\$55,000,000
Office	Medford, MA	\$25,750,000