

# Financing and Investing in Green Buildings

Why Green? Why Now?

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# Presentation Overview

## Why Green? Why Now?

- Green Building Trends
- Factors Driving Green Building Investment
- Green Building Investment Prospects

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# LEED System - Overview

- LEED = Leadership in Energy and Environmental Design
- Created and administered by the U.S. Green Building Council (USGBC)
- Oriented toward *design* rather than *performance*
  
- Original focus on commercial; now piloting residential and retail
- Original focus on new construction (standards released in 2000); now includes redevelopment of existing buildings (2004)
- Focus shifting to investment real estate with release of interior spaces (2004); now “core and shell” program (2006)

# LEED System – Rating System

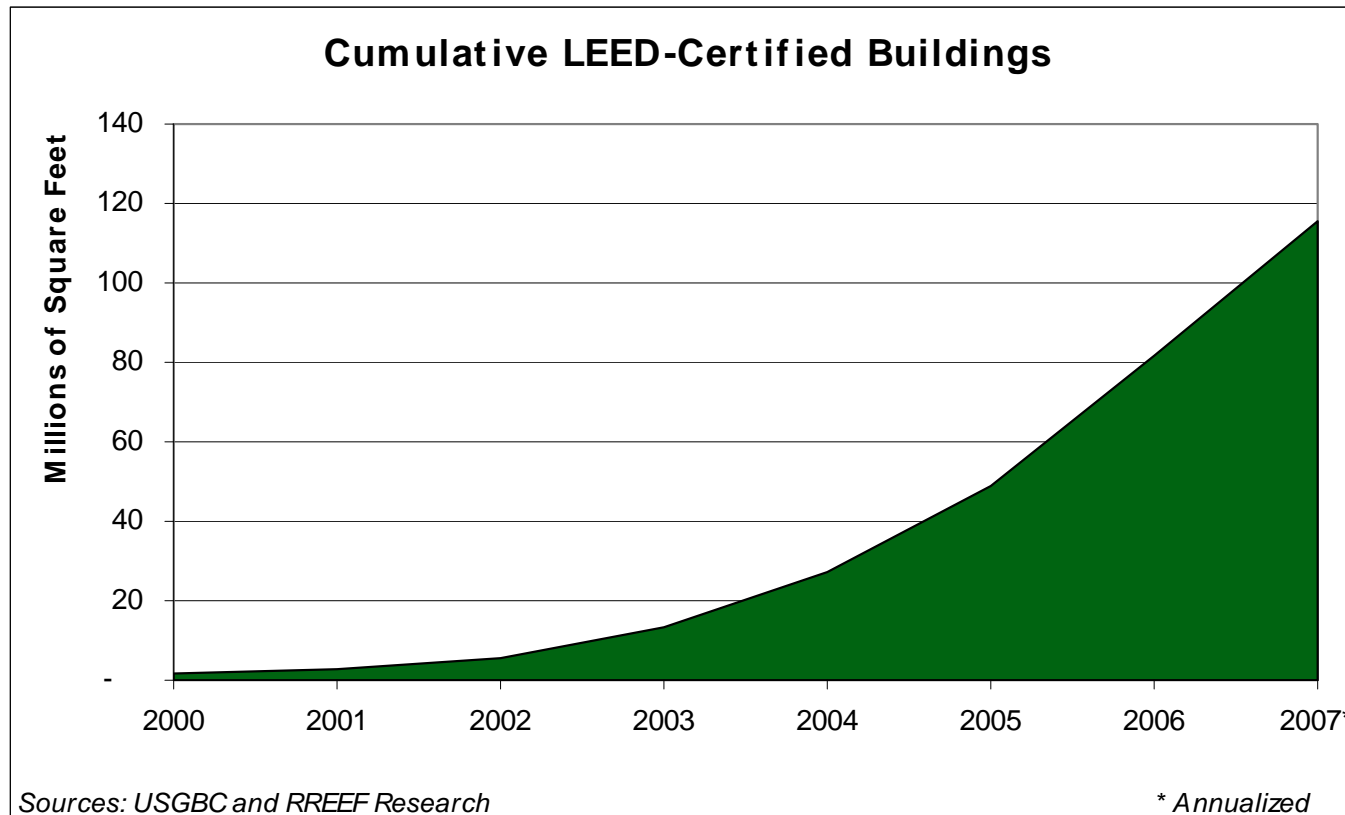
Four levels: **Certified**, **Silver**, **Gold**, **Platinum** based on point system

- Sustainable site
- Water efficiency
- Energy and atmosphere
- Materials and resource
- Indoor environmental quality
- Innovation and design process

→ *More than just energy efficiency*

# Green Building Trends: Overall Volume

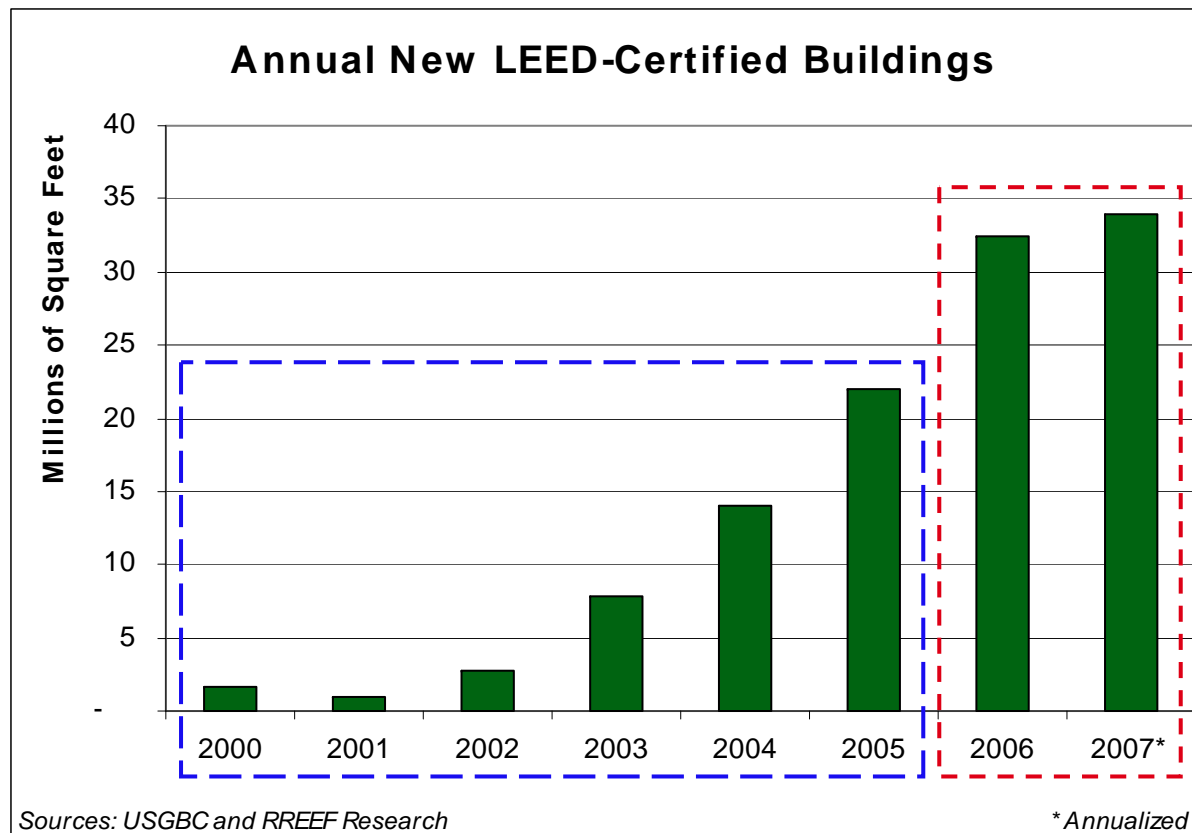
Yes, green building really is a big deal



*Over 100 million square feet of building area and counting*

# Green Building Trends: Annual Volume

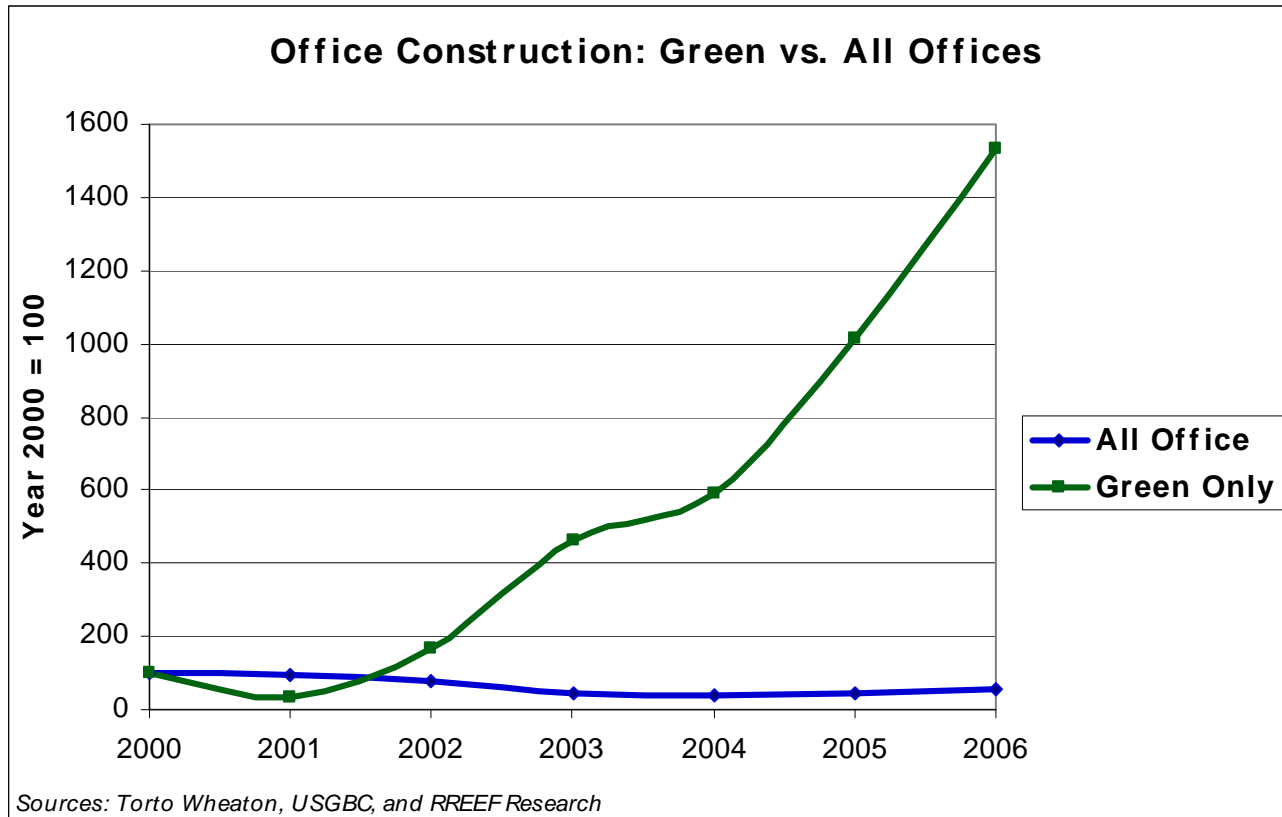
The amount of new green buildings is increasing each year . . .



*Amount in last two years > 35% amt in prior six years combined*

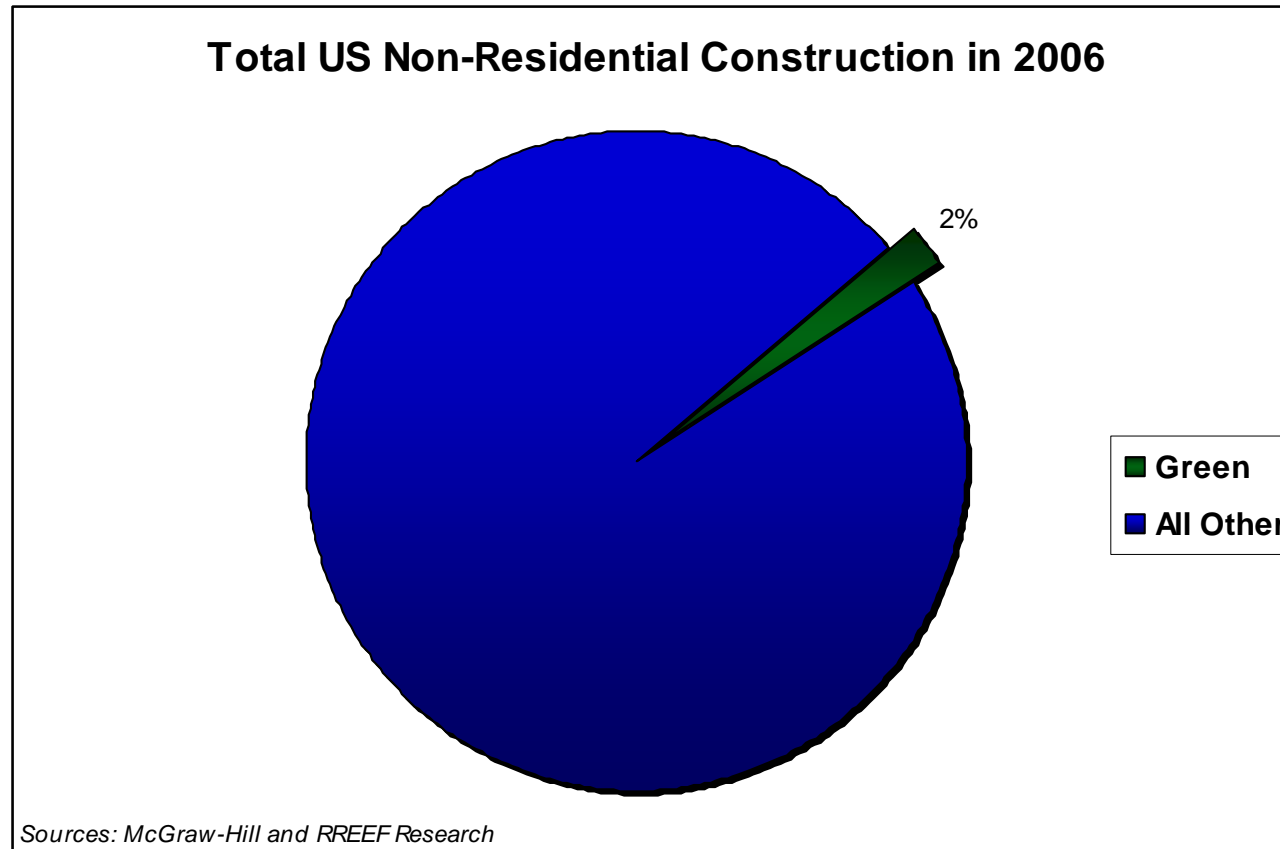
# Green Building in Context

... while commercial construction overall has been flat.



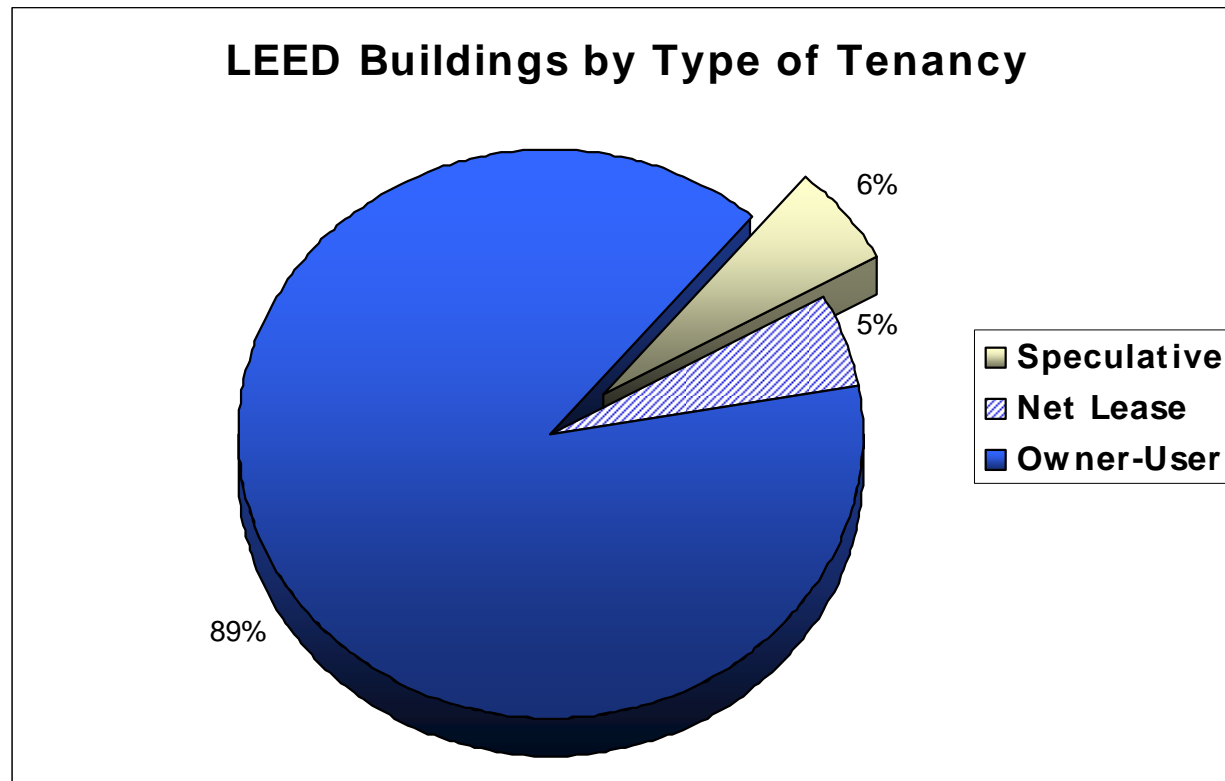
# Green Building in Context

Still, green building accounts for negligible share of total construction . . .



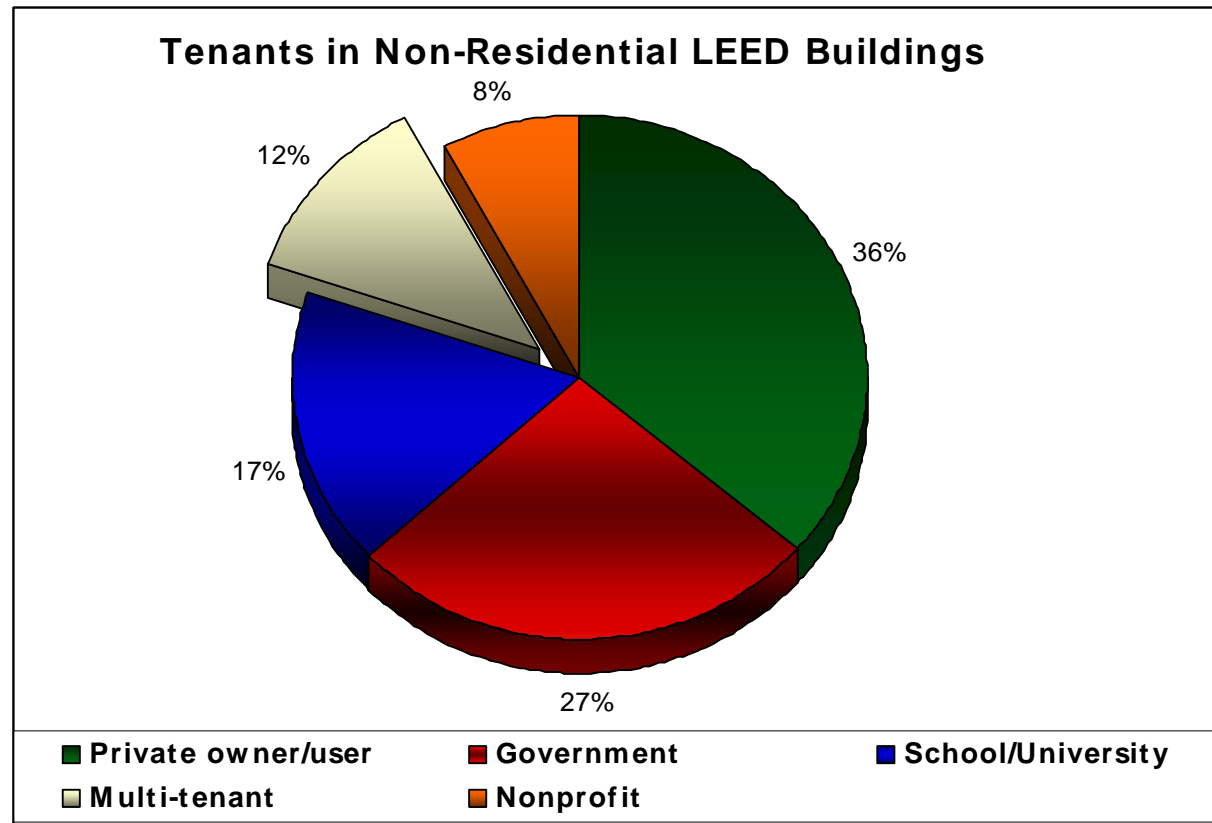
# Green Building in Context

. . . and vast majority of green product is owner-occupied or build-to-suit . . .



# Green Building in Detail

... as large corporations / institutions account for most green bldgs ...



*Buildings with traditional multi-tenant leases account for only 12% of green building area*

## Green Building in Detail

. . . though the institutional share is dropping and multi-tenant share is rising.

### Tenant Composition in LEED-Certified Buildings By Year of Certification

	2000-2004	2005-07	Change
Private owner/user	40.8%	33.0%	(7.8%)
Government	38.7%	20.7%	(18.1%)
School/University	9.9%	19.3%	+9.4%
<b>Multi-tenant</b>	<b>3.5%</b>	<b>14.7%</b>	<b>+11.2%</b>
Nonprofit	4.2%	8.7%	+4.5%
Residents	2.8%	3.5%	+0.7%
	100.0%	100.0%	(0.0%)

Sources: USGBC and RREEF Research

# Factors Driving Green Building and Investment

- Tenant Demand
- The Role of Government
- Investor Demand
- Industry Support and Pressure
- The Compelling Business Case for Green Buildings

# Tenant Demand

- Market differentiator / goodwill benefits
- Civic responsibility / corporate accountability
- Financial motivations
  - reduce utility bills
  - productivity gains
- The new “clear 30”

➔ *tenants will increasingly migrate from conventional to greener buildings, esp. large anchor tenants that demand premium space.*

# Role of Government

- Market influence
  - as a buyer – Federal gov't is country's largest landlord (by far)
  - as a renter – Federal gov't is country's largest tenant (by far)
- Raise awareness / demonstrate efficacy
- Regulatory powers – local edition
  - subsidies → mandates
  - ASHRAE building codes: higher energy efficiency standards
- Regulatory powers - federal
  - “carbon tax” or a “cap-and-trade” system: the new “ADA”

➔ *conventional buildings will be increasingly difficult to construct, and more costly to operate .*

## Investor Demand

- Socially-conscious investing (Responsible Property Investing)
- Capital flows from foreign countries
- Increasingly attractive investment options

## Industry Support and Pressure

- Strong pro-environmental stances by key real estate industry groups → pressure industry participants
- Raising awareness of the opportunities
- Clearinghouses of information

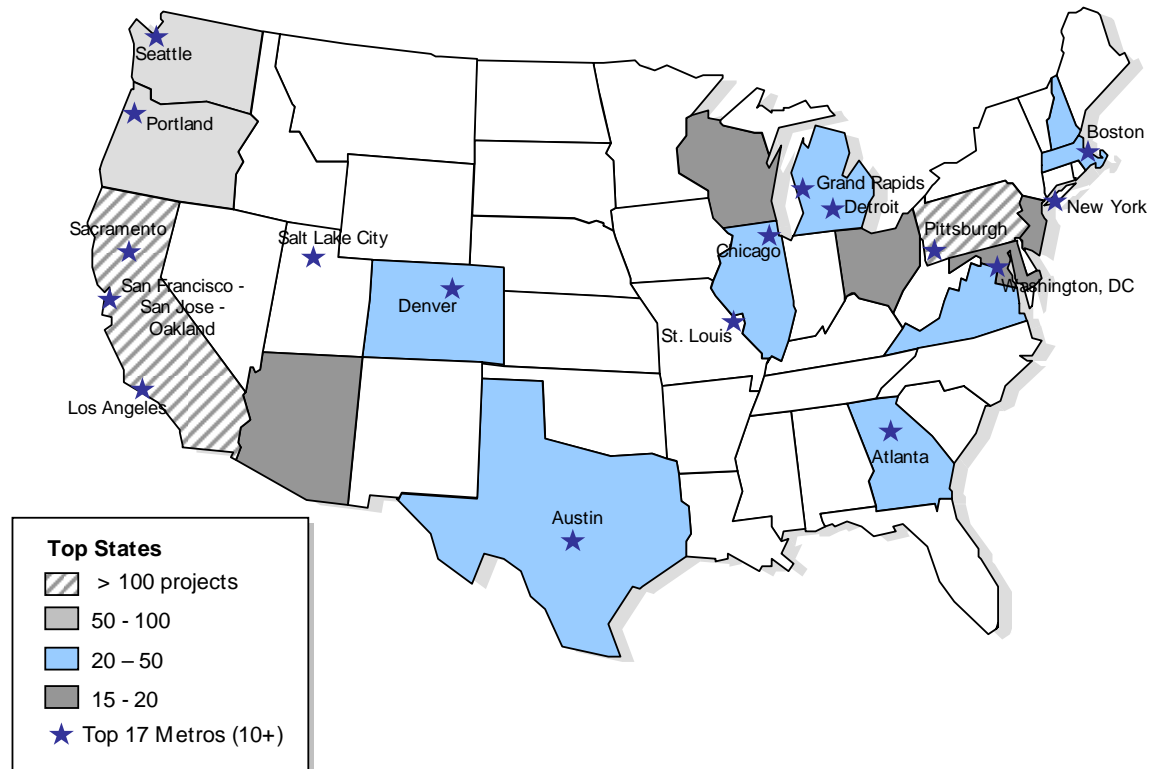
→ *developers, lenders, and fiduciaries will be increasingly pressured and empowered to adopt greener policies*

# The Business Case for Green Buildings

- New construction
  - significant operating cost savings
  - cost premium for green construction can be minimal to non-existent
  - incentives can more than offset any cost premiums
- Renovating existing buildings
  - compelling story in many cases but . . .
  - diversity of the standing stock makes blanket statements impossible
- Operating Performance
  - higher rents
  - lower vacancies and turnover
- Financial Returns
  - longer system lives and lower maintenance expenses but . . .
  - value premiums upon resale uncertain (though most likely)

# Green Building Trends: What's Next and Where?

**LEED-Certified Buildings  
Top States and Metros**



# Critical Mass?

## Commercial Buildings Seeking LEED Certification in San Francisco Downtown

Project	Size (SF)	Sponsor	Status/Date
<b>Approved/Under Construction</b>			
222 Second St	617,000	Tishman Speyer	Approved - 2010?
535 Mission St.	293,750	Beacon Capital	Approved - 2009
555 Mission St	555,000	Tishman Speyer	U/C - 2008
Folsom Place	507,298	TMG and RREEF	U/C - 2009
Foundary Square	202,000	Wilson Meany Sullivan	U/C - 2008
	2,175,048		
<b>Planned and Proposed</b>			
110 Embarcadero*	65,000	Hines Interests	Planned
350 Mission St	340,000	GLL Properties	Planned
40-90 First St.	520,000	Solit Interest Group	Planned
Piers 27-31	440,000	Shorenstein and Farallon	Planned
1401 Third St.	420,000	Catellus	Planned
	1,785,000		
<b>Grand Total</b>	<b>3,960,048</b>		

Sources: RREEF Research

\* plus 20 condominium units

*Green market share for major commercial bldgs near 100%*



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