

# *Presenting the Case for Sustainable Development*

Presented by Nancy Montoya  
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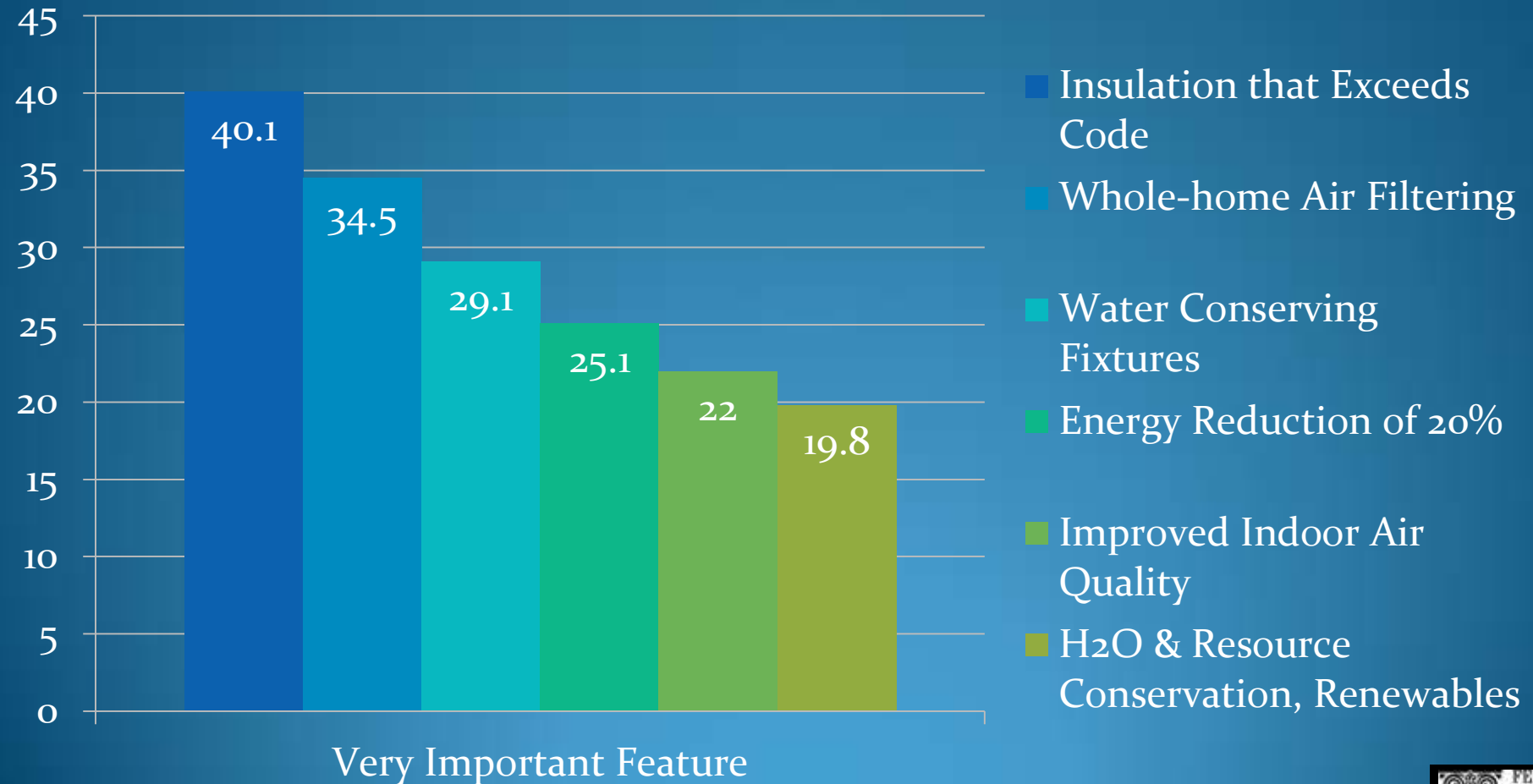
# Residential: Consumer Demand for “Green” Homes

## “Measuring the Market for Green Residential Development”

- Robert Charles Lesser & Co. conducted a national survey, January 2008
- Geographically stratified
- Targeted existing homeowners earning \$50,000 or more or retirees with net worth of \$250,000+
- Sent to 10,000 potential respondents, response rate of 1,101 (+10%)

# Where's the Demand?

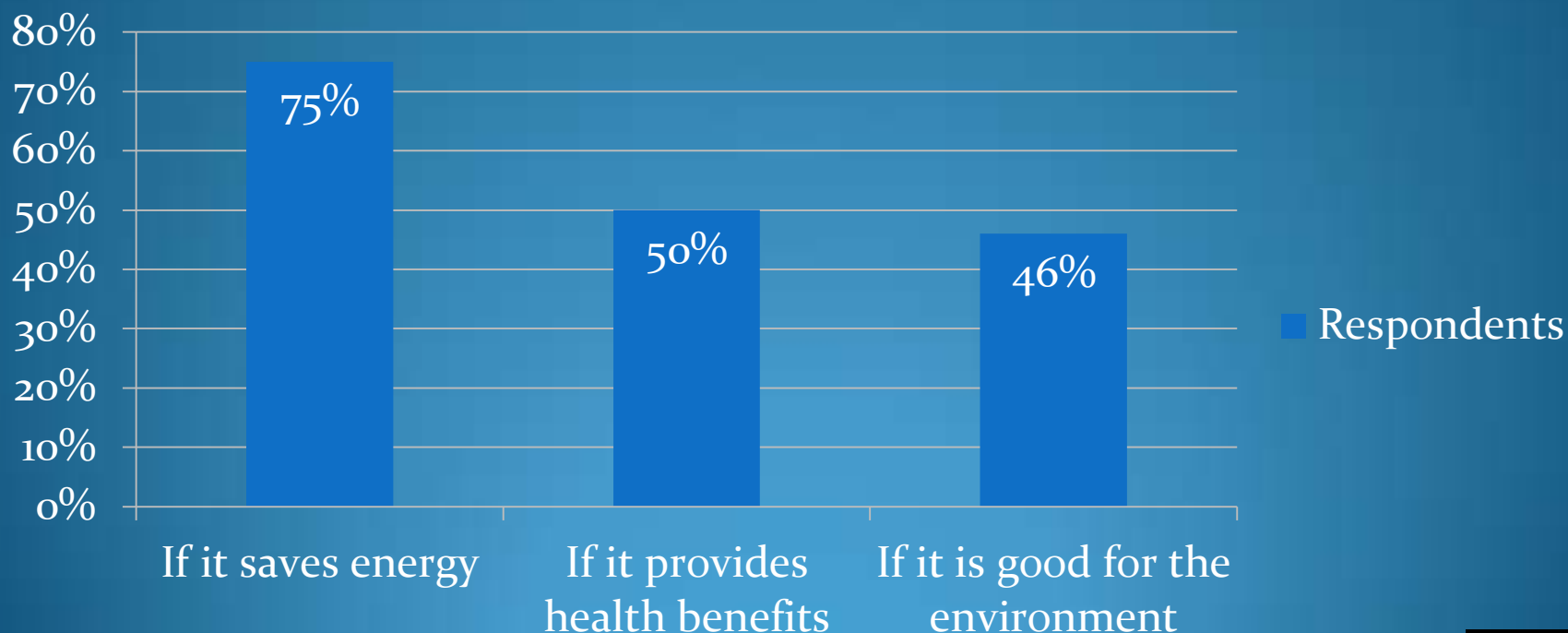
“How important are the following in your next home purchase?”



# Are they willing to pay for it?

Assuming that their investment pays them back over time, buyers are willing to spend additional money on their home...

## Respondents



# Where are the opportunities?

According to RCLCO's consumer research, 36.4% of potential homebuyers rank the **environment, energy savings or health benefits** as their primary decision-making factor in their next home purchase

- Forest Greens: 6.1% buyers
- Greenback Greens: 21.8% buyers
- Healthy Greens: 8.5% buyers
- RCLCO suggests Healthy Greens have the strongest market potential

**Greens are also exhibiting pent-up demand for higher-density, walkable communities**

# Commercial Real Estate:

## What's the *Real* Cost of Building Green? New Construction

Surveyed over 300 buildings, gathered data on 170 buildings that were certified or anticipating certification through the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) system or similar systems

Evidence showed that 170 U.S. buildings and 10 non-U.S. Buildings reported green "premiums" ranging between 0% and 18% with a **median of 1.5% increased cost over traditionally built buildings**

Large majority showed a range between 0% and 4%

Typical additional cost per square footage is \$3-\$9/sq. ft.

Source: "Greening the Our Built World: Costs, Benefits, and Strategies", Greg Kats, Island Press, 2010

# How Much Energy Do Green Buildings Save?

Actual and projected energy use ranged from less than 10% to more than 100%\*

**Median reduction of 34%**

60 buildings reported annual energy savings ranging from \$0.10/square foot to over \$2.00/square foot

Median annual energy savings of \$0.50/sq. ft.

Present value of energy savings ranges from \$4/sq. ft. to \$16/sq. ft.\*\*

**Present value of 20 years of energy savings in green offices is \$10/sq. ft.---3 x the reported green premium of \$3.40/sq. ft.**

Even with energy prices relatively flat at 2% discounted energy savings exceeded the average green premium within five to eight years.

# What are the Impacts of Green Building on Property Values?

Higher occupancy rates, less turnover

Higher rents: Comcast Building and One Crescent Yard, Philadelphia, PA, LEED Platinum, sustained rents that are **25% to 50%** higher than market rates.

Higher sales prices: 2008 CoStar conducted a sample survey of 355 LEED certified office buildings sales; they reported that a **\$24/sq. ft increase in sales price** could be attributed to LEED certification.

Anecdotal evidence points to increased values due to lower operating costs (One and Two Potomac Yard, Arlington, VA LEED Gold **reported a 2% increase in value based on reduced operating costs**)

As the industry matures and competes with non-sustainable buildings other collateral value supports could include **reduced insurance premiums, lower interest rates from lenders due to increased net operating income contributing to a lower rate of default**

# What are the Impacts of Green Building on Property Values?

The propensity-score-weighted estimates show that buildings with green ratings in 2009 command rental rates that are substantially higher than those of otherwise identical office buildings, while explicitly controlling for the quality and the specific location of the buildings. **Premiums in effective rents are even higher...**the selling prices of green buildings relative to comparable buildings nearby are higher by more than 13 percent.

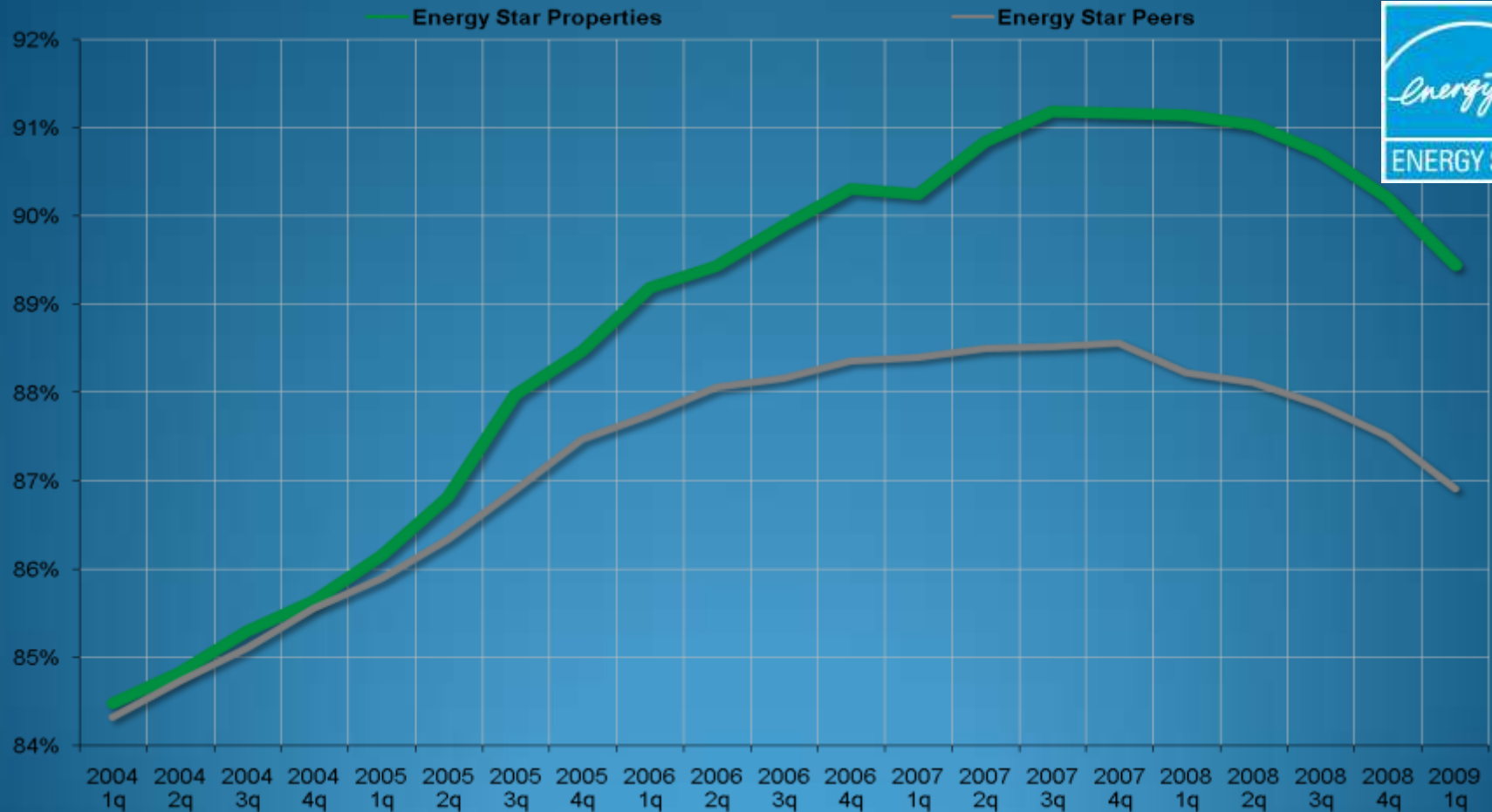
Further calculations show that a **one dollar saving in energy costs of a building is on average associated with a 3.5 percent higher rent...and a one dollar saving in energy costs is associated with a 4.9 percent premium in market valuation.**

Source: “*Doing Well by Doing Good: Green Office Buildings.*”, Eichholtz, Piet MA; Kok, Nils and Quigley, John M. American Economic Review, 2010

# Down Market – Flight to Quality

## Energy Star Buildings vs Market Comparables

### Occupancy Rates – Office



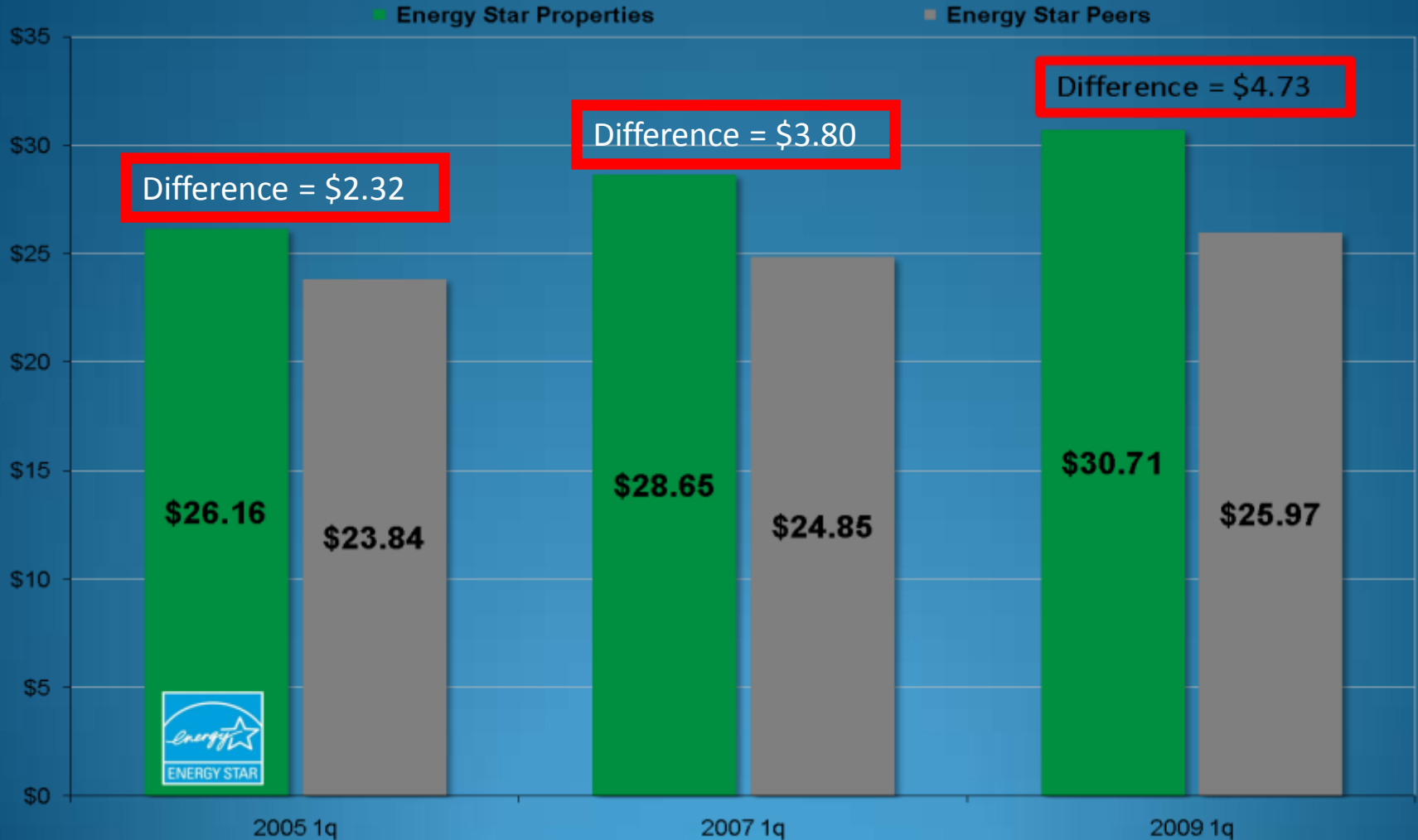
Source: CoStar Analytics



# Rental Rates

## Energy Star vs. Market Comparables

### Direct Rental Rates – Office



Source: CoStar Analytics

# LEED Certified Rental Rates vs Peer Group

## Early Returns on Minimal Data Points



Source: CoStar Analytics



# How Do We Value Green Components?

## ONE EXAMPLE



# Ironhorse Affordable Housing

Oakland, CA



# CMP Green Value Score Discussion

1. ENERGYSTAR Score = 92

## 2. UNDERWRITING STANDARD

- Some proximity to transit
- Green roof
- High energy efficiency
- High water efficiency
- Stormwater reuse
- Onsite energy generation
  - common areas
  - hot water
- Urban infill location
- Low VOC materials

3. GREENPOINT RATED = 146 Points

CMP Green Value Score Calculation	Score	Value Ratio	Score
ENERGYSTAR Score	92	40%	36.80
Green Building Underwriting Standard Score	65	35%	22.75
LEED Rating / Green Point Rated Score	NONE	0%	
	CERTIFIED	2%	
	SILVER	5%	
	<b>GOLD</b>	<b>10%</b>	<b>10</b>
	PLATINUM	15%	
Climate Neutral Certified	YES	10%	
	NO	0%	0
<b>CMP GREEN VALUE SCORE</b>		<b>100%</b>	<b>70</b>

**CMP Green Value Score = 70**  
**High Tier 2 Asset Rating**



# Challenges for Louisiana:

Local Developers and Investors are just now beginning to understand the value of building sustainably

Perception that sustainable building is prohibitively expensive

Professional trades, builders and labor are still on a learning curve

Banks have not yet perfected how to value and underwrite sustainable development

States, regions or cities have not prioritized and incorporated sustainable development into policy, government infrastructure or financing tools

Authorities for sustainable decision-making are fractured or siloed

Elected officials and government agencies have not yet recognized the competitive advantage that sustainable development provides for business attraction and retention

The importance of affordable housing and health-making amenities are seen as primarily an inner-city concern

# Sustainability is about more than buildings...

Walkability: [www.walkscore.com](http://www.walkscore.com)

- Baton Rouge = 42, New Orleans = 56 San Francisco = 84.9

## What makes a neighborhood walkable?

- **A center:** Walkable neighborhoods have a center, whether it's a main street or a public space.
- **People:** Enough people for businesses to flourish and for public transit to run frequently.
- **Mixed income, mixed use:** Affordable housing located near businesses.
- **Parks and public space:** Plenty of public places to gather and play.
- **Pedestrian design:** Buildings are close to the street, parking lots are relegated to the back.
- **Schools and workplaces:** Close enough that most residents can walk from their homes.
- **Complete streets:** Streets designed for bicyclists, pedestrians, and transit.
- **Financial:** One point of Walk Score is worth up to \$3,000 of value for your property

# How do we get there?

Commitment to sustainable development

Individual developer decision or investor-driven

Corporate commitment

Community Activism

Local or Regional Government commitment to sustainable principals:

Principals are incorporated into policy, master plans, land use decisions, taxing or tax credit structures, allocation of resources, accountability

Federal, state or local incentives

For buildings or communities: integrated design involving all parties early in the planning phases that is carried through financing and management stages

# How do we get there?

## EPA

- Where are we now?
- Where are we going?
- Where do we want to be?
- How do we get there?

## Action Planning and the Sustainable Community

- Environmental Stewardship Action Plan
- Land Use Action Plan
- Community Heritage Action Plan
- Civic Participation Action Plan
- Pollution Prevention and Recycling Action Plan
- Transportation Action Plan
- Public Facilities Action Plan
- Energy Conservation Action Plan
- Human Health and Environmental Health Action Plan
- Natural Disaster Action Plan
- Climate Change Action Plan
- Indicators
- Financial Tools

# How do we get there?

- EPA grants to develop area-wide plans for the reuse of formerly contaminated properties and targeted technical assistance to communities tackling growth and development issues;
- HUD Sustainable Community Regional Planning Grants to assist in the development and execution of regional plans that integrate affordable housing with neighboring retail and business development and realize more livable and sustainable communities across the country;
- DOT TIGER II Grants to fund innovative surface transportation projects that can improve communities' quality of life while advancing broader transportation goals;
- Awarded in conjunction with DOT's TIGER II grants, HUD Community Challenge Planning Grants to support local planning activities that integrate transportation, housing, and economic development.

# How do we get there?

- *Federal: Personal Exemption: Residential Energy Conservation Subsidy*
- *Federal: Personal Tax Credit Residential Energy Efficiency Tax Credit*
- *Federal: Residential Renewable Energy Tax Credit*
- *Retrofit at the point of sale (203k purchase/rehab)*
- *Qualify for an Energy Efficient Mortgage (EEM)*
- *Tap into Builder's Challenge incentive: U.S. DOE*
- *Check your state for incentive programs in place*
  - <http://www.dsireusa.org>
- For existing homeowners that are interested in retrofitting:
  - Home Equity Loans or Lines of Credit
  - Refinance
  - Matching incentives
  - Loans through separately managed Revolving Loan Fund

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# How do we get there?

- Low Income Housing Tax Credits: Points via the Qualified Applications Process
- New Markets Tax Credits for Qualified Commercial Buildings
- State Incentives
- Specialized lending products that offer below-market financing (Enterprise Green Communities, LISC) for developments that meet green criteria
- Voluntary Carbon Credits
- U.S. Department of Energy is experimenting with several different programs and models designed to reach scale within the industry
- Qualified Energy Conservation Bonds: LA Authority \$40 MM

# Nancy Montoya

## Federal Reserve Bank of Atlanta

### New Orleans Branch



Senior Regional Community and Economic Development Manager, Gulf Coast (LA, MS, AL and FL panhandle)

The Community Affairs program promotes fair and informed access to financial markets for all consumers, recognizing the particular needs of underserved populations.

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