

Turning **Green** into **Gold**

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Research Acknowledgements:



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Tree Hugger Disclosure



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Part I
What is a GreenR Company?



Part II
Why Go Green?



Part III
Green Building Case Study

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Part I **What is a GreenR Company?**

A GreenR Company is a company that has infused Green Technologies into their business practices. Think Green Fusion



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Brokerage Services

- ❖ Acquisition/Disposition
- ❖ Landlord/Tenant Representation



Green Branding

It's the color that conveys a spectrum of happy ideas: environmental health, recycling, alternative energy, and generally doing the right thing. And green business and product names are flourishing.



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New Commercial Lease Clause for Texas REALTORS®

TAR – 2103

Commercial Lease Addendum for Expense Reimbursement

(2) “CAM” means all of Landlord’s expenses reasonably incurred to maintain, repair, operate, manage, and secure the Property (for example, security, lighting, painting, cleaning, decorations, utilities, trash removal, pest control, promotional expenses, and other expenses reasonably related the Property’s operations); CAM does not include capital expenditures, interest, depreciation, tenant improvements, insurance, taxes, or brokers’ leasing fees. Notwithstanding the foregoing, CAM does include the amortized costs incurred by Landlord in making capital improvements or other modifications to the Property to the extent such improvements or modifications reduce CAM overall. These costs will be amortized over the useful life of the improvement or modification on a straight-line basis; however, in no event will the charge for such amortization included in CAM exceed the actual reduction in CAM achieved by the improvements and modifications.

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Architectural and Energy Saving Services:

- ❖ LEED Project Certification & Energy-Star Compliance
- ❖ Green Existing Building Retrofits
- ❖ Green ROI Feasibility Assessment & Life-Cycle Costing Analysis
- ❖ Project Goal-Setting & Design Integration
- ❖ Technical Consulting & Project Management
- ❖ Green Material Specification

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LEED® Project Certification

LEED: Leadership in Energy and Environmental Design - U.S. Green Building Council (USGBC)

LEED AP: LEED Accredited Professional



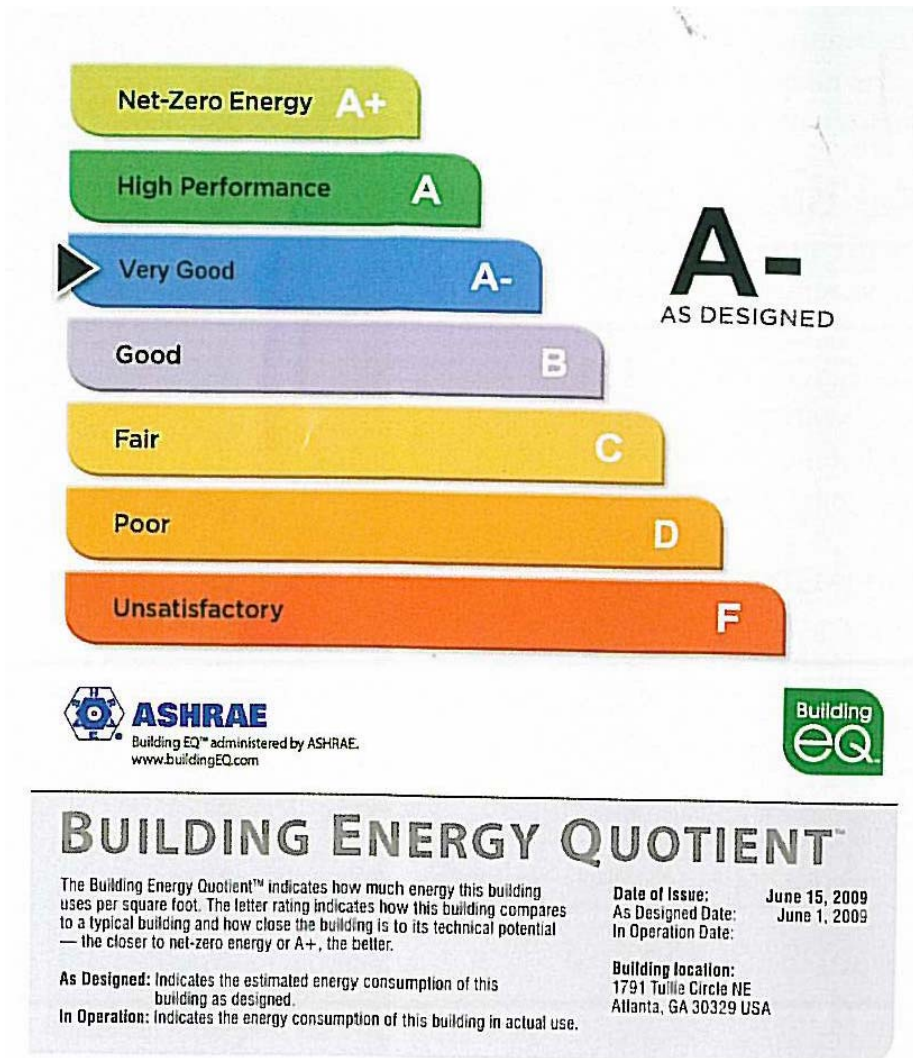
Energy Star Compliance

Energy Star® is a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy.



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ASHRAE Building Energy Quotient Program



For more information go to www.buildingeq.com

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a GREENR company

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England & Wales Performance Certificates

Energy Efficiency & Environmental Impact Ratings

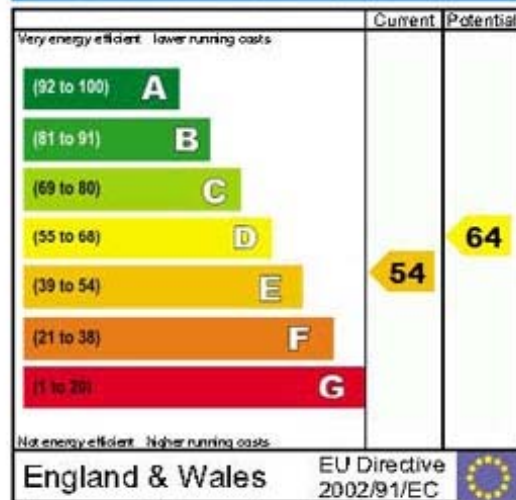
Energy Performance Certificate

27, Bratton Road
WESTBURY
BA13 3EP

Dwelling type: House
Date of assessment: 27 April 2007
Date of certificate: 27 April 2007
Reference number: 21924
Total floor area: 150m²

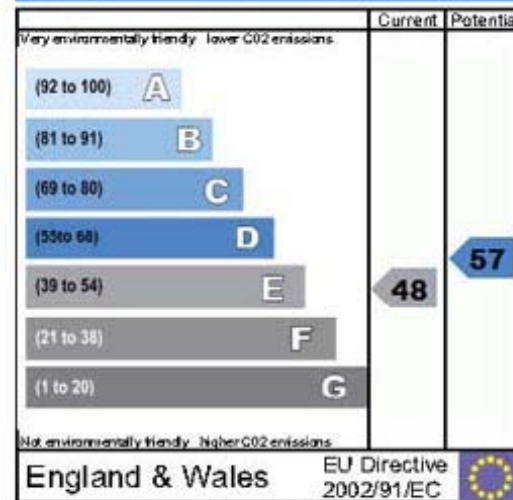
This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.

Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating, the more energy efficient the home is and the lower the fuel bills will be.

Environmental Impact Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating, the less impact it has on the environment.

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Green Existing Building Retrofits

There are almost limitless possibilities to make an existing building green:

- ❖ Light Pollution Reduction
- ❖ Water Use Efficiency
- ❖ Energy Performance Optimization
- ❖ Green Cleaning Policy
- ❖ Occupant Comfort

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Green ROI Feasibility Assessment

Initially, during programming (conceptual design), the project team assesses credits, options, opportunities and strategies defined by the site conditions and parameters, to determine a preliminary cost evaluation and Return of Investment (ROI) projection.

Life-Cycle Costing Analysis

A method for assessing the total cost of facility ownership. It takes into account all costs of acquiring, owning, and disposing of a building or building system. The goal is to achieve the lowest overall cost of ownership based on a benchmark level of quality. This should be performed early in the design process while there is still a chance for refinement.

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Project Goal Setting

Quite simply, *“What objectives do we hope to achieve?”*

Technical Consulting & Project Management

Assemble a team of technically savvy field experts to answer challenges, provide guidance, innovation and expertise.

Design Integration

“How do we integrate Green Technologies into the design to achieve our Project Goals?”

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Green Material Specification

A LEED AP can insure that specified green products meet stringent environmental requirements, and debunk false product claims or scams (often referred to in the industry as “Green Washing”).

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Part II **Why Go Green?**

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Green Versus Non Green:

March 2009 RICS Research Report titled Doing Well By Doing Good? An Analysis of the Financial Performance of Green Office Building in the USA

- ❖ 6% effective rent premium increase.
- ❖ 16% higher selling prices.
- ❖ \$5.5 million average market value improvement (at prevailing cap rate).
- ❖ \$5.7 M increase in market value for conversions.
- ❖ Premium variation consistent with energy-saving characteristics.
- ❖ \$1.00 energy cost savings = \$18.00 in the increased valuation of an Energy-Star certified building.

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USGBC data:

Commercial buildings annually consume:

- ❖ > 30% of the total energy.
- ❖ > 60% of US electricity.
- ❖ Approx. 5 billion gallons of potable water per day (to flush toilets).

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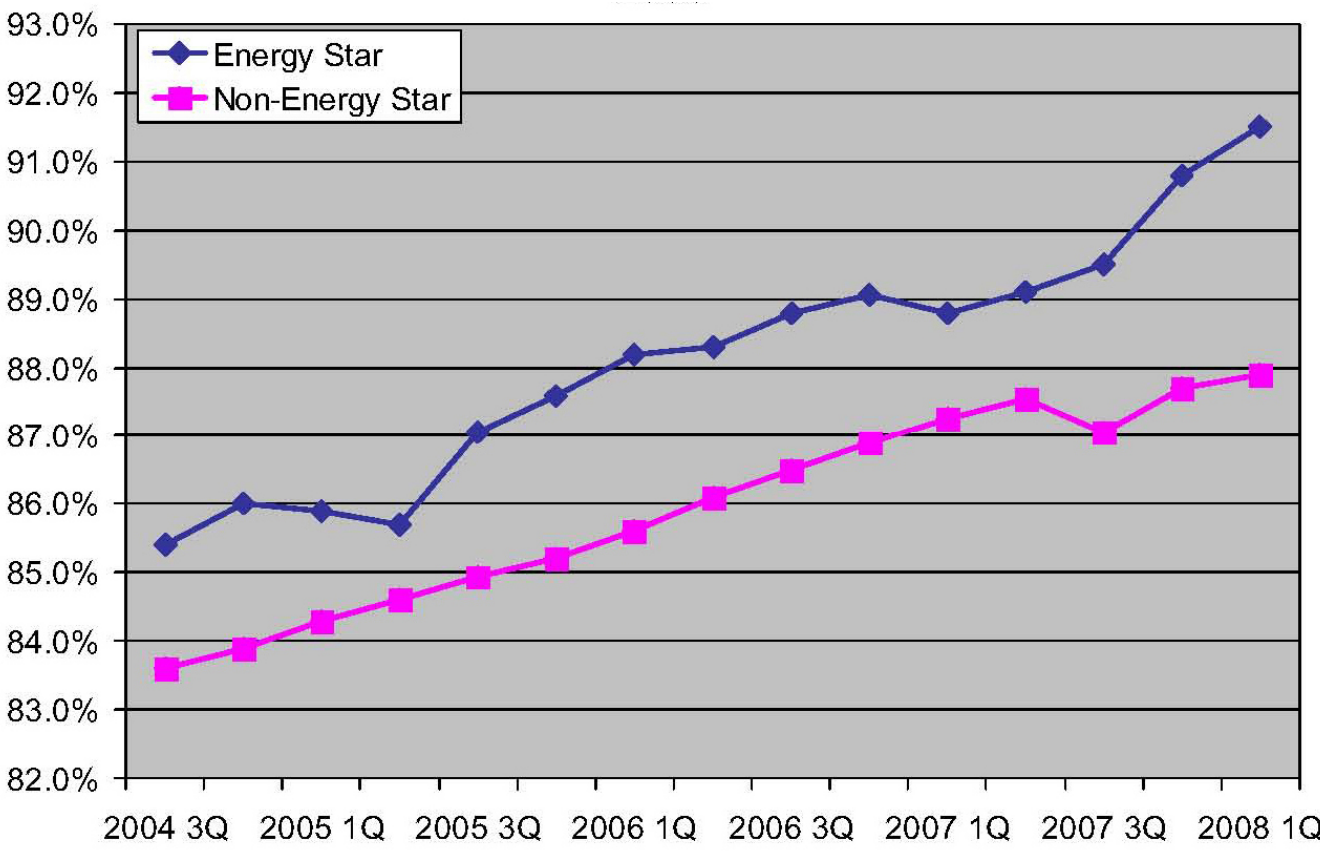
2008 CoStar Data:

The following filters were used to develop a comparison:

- ❖ Only Class A office buildings
- ❖ 200,000 square feet or more
- ❖ 5 stories or more
- ❖ Built since 1970
- ❖ Multi-tenanted
- ❖ 1200+ Energy Star-rated buildings (322 M sq.ft.)
- ❖ 580 LEED certified buildings

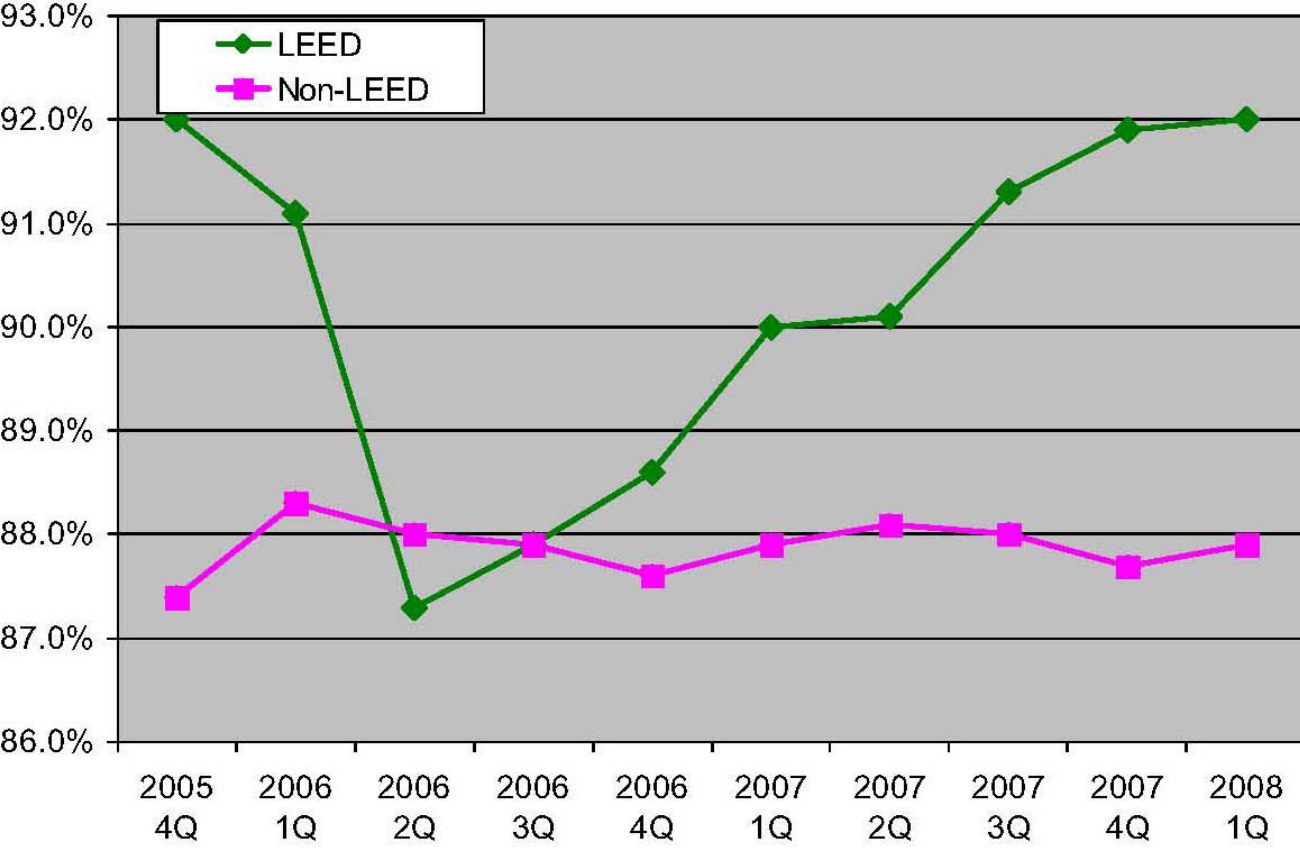
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Occupancy Rates By Quarter – Energy Star vs Non-Energy Star



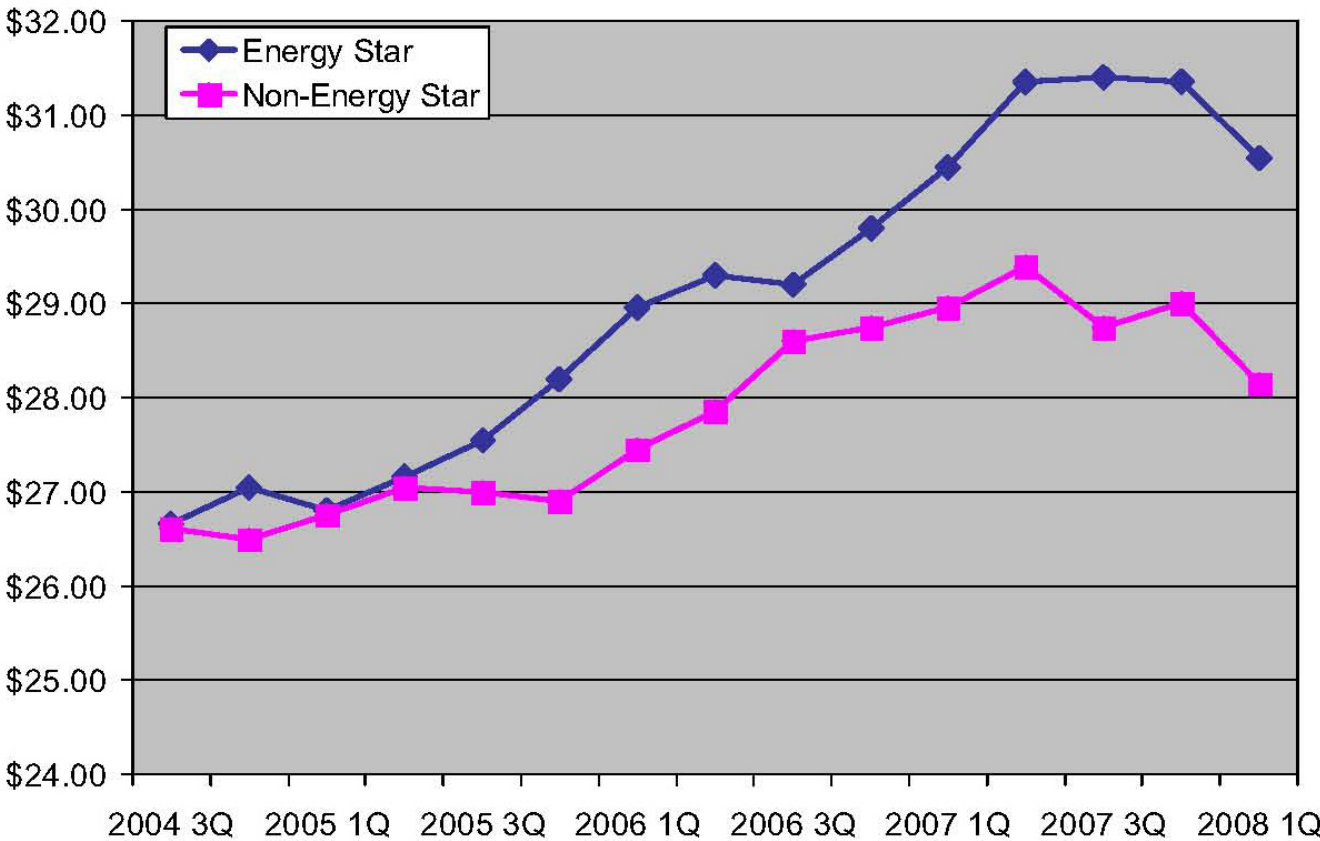
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Occupancy Rates – LEED vs Non-LEED



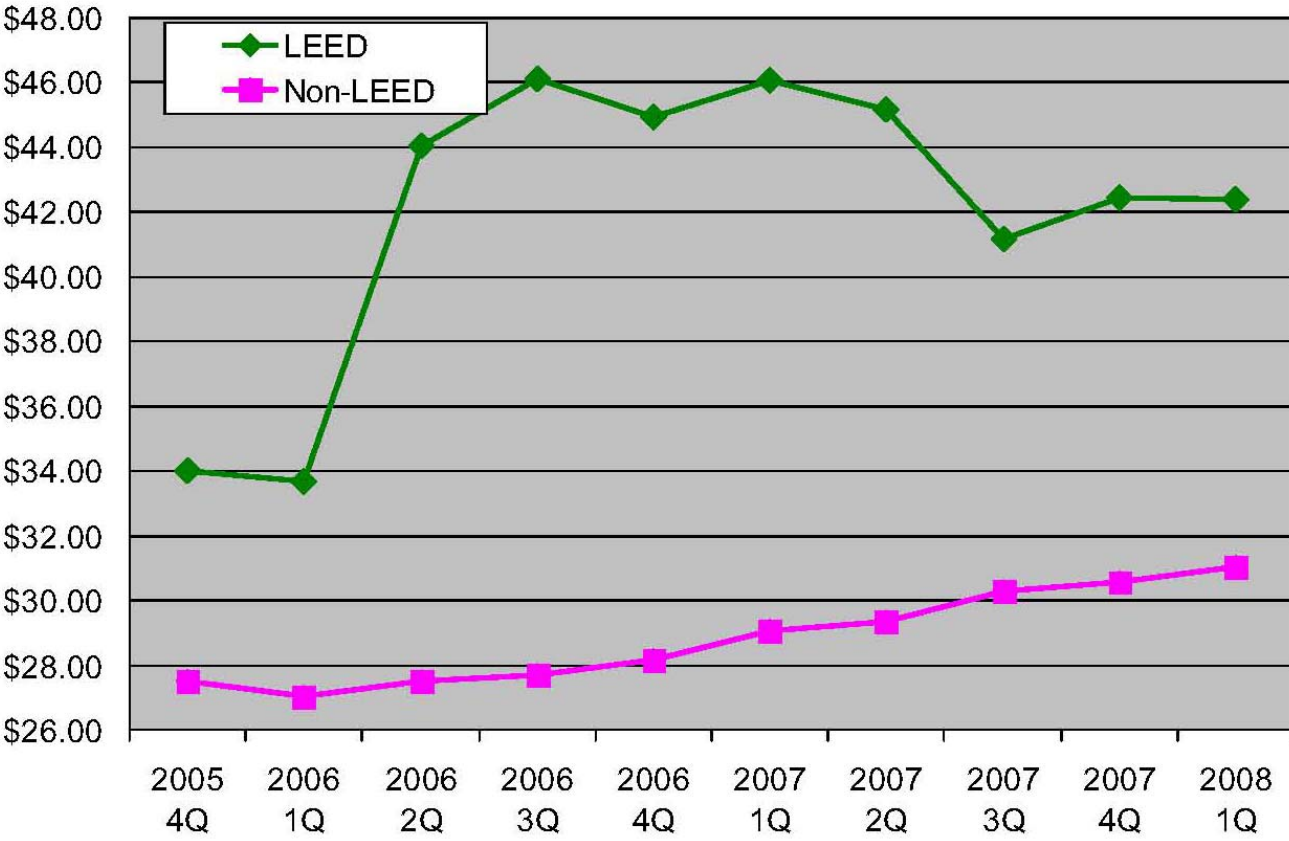
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Direct Rental Rates – Energy Star vs Non-Energy Star



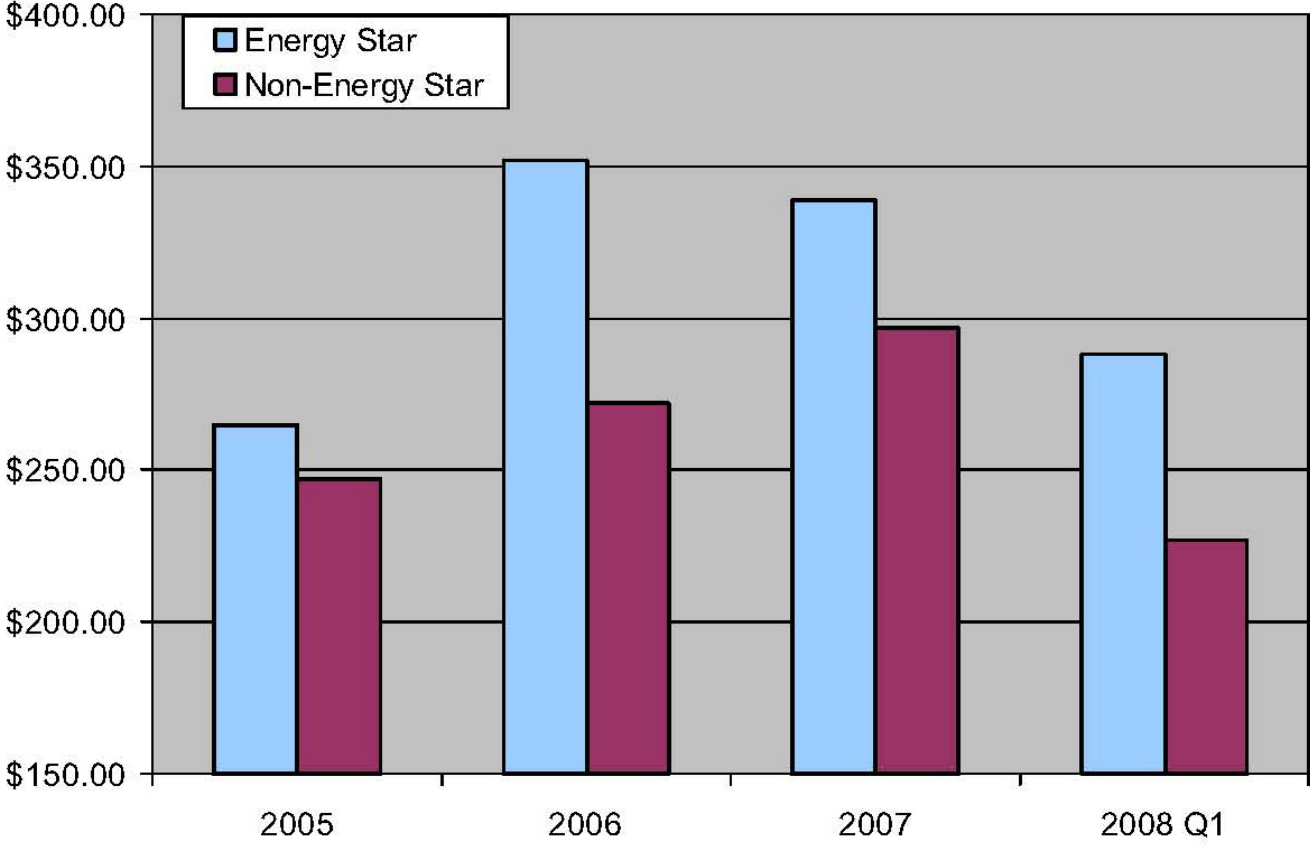
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Direct Rental Rates – LEED vs Non-LEED



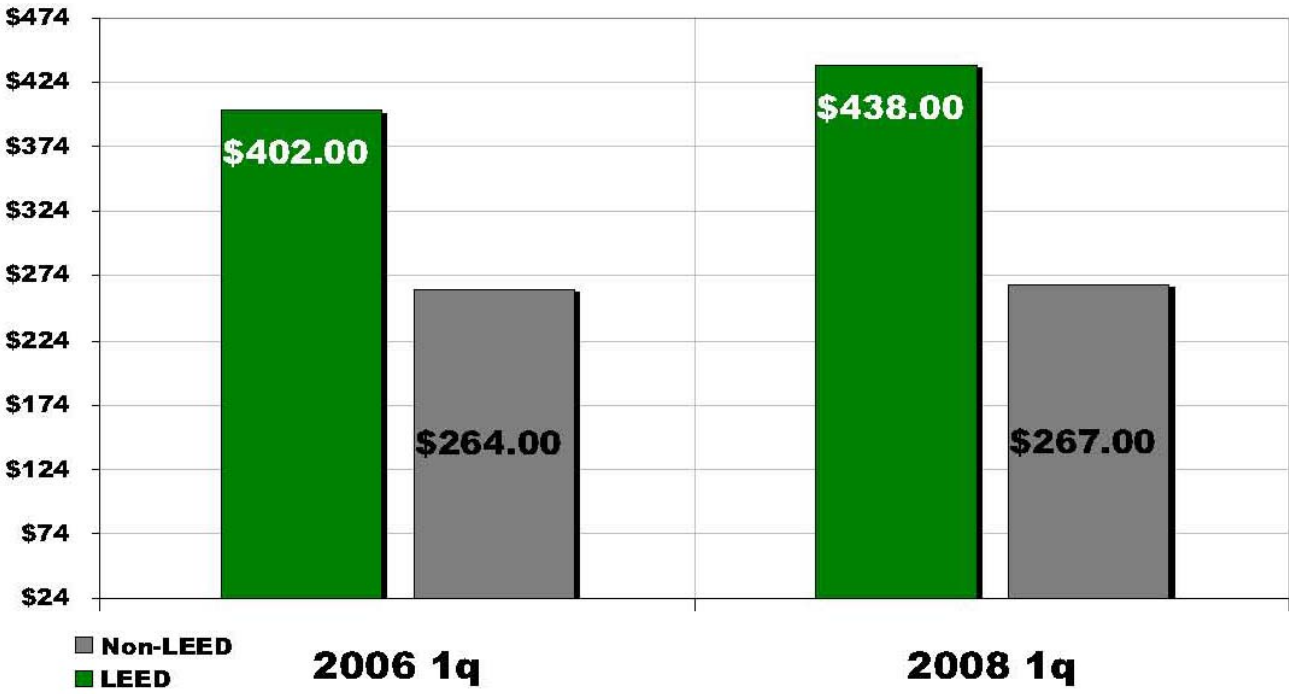
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Sales Prices Per Square Foot – Energy Star vs Non-Energy Star



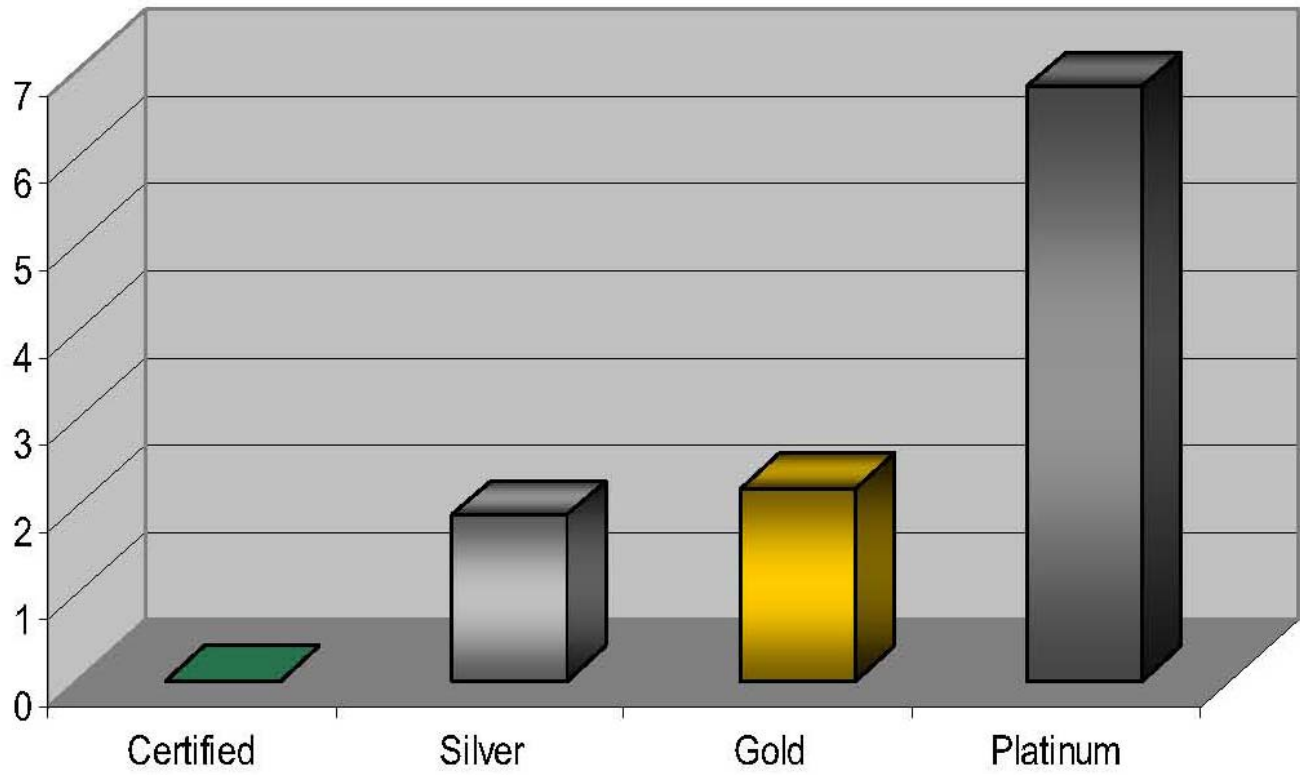
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Sales Prices Per Square Foot – LEED vs Non-LEED



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Extra Costs to Become LEED Certified as of 2007 - Excluding Certification Fees:



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Federal Government Opportunities for Private Sector:

- ❖ Government owns and leases 354 million sq. ft. of commercial properties (Largest Property Owner and Energy User in the USA)
- ❖ President recently issued a memo directing federal agencies to dispose of excess government properties (est. \$3 billion savings)
- ❖ Report by BOMA and the U.S. Green Council concluded that the Obama administration has the authority to use 30 of existing federal programs to improve energy in private sector commercial real estate structures
- ❖ Example, one current federal program offers \$1.80 per sq. ft. tax credit for certain major renovations, others incentives are available for energy-efficient and heating-and-cooling system upgrades
- ❖ For details of Federal Incentives/Policies for Renewables & Efficiency go to **www.dsireusa.org**

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Who is Buying and Leasing Green Real Estate?:

Of the 300 REITs in the U.S., 41% are actively pursuing energy efficiency and green building upgrades and another 27% plan to do so, said UBS, citing the industry newsletter Progressive Investor.

To learn more about who's buying and leasing Green Real Estate, go to www.colinfox.com

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Part III **Green Building Case Study**

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Case Study: **LEED vs Non-LEED**



Subject Property:

253 Medical Center Webster, TX 77598

Jacob White Development

48,155 SF Medical Office Building



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Developer's Original Goals:

- ❖ Incorporate latest green technology standards
- ❖ Balance aesthetics and energy performance
- ❖ Lower operating costs
- ❖ Improve indoor air quality
- ❖ Reduce structure's impact on the environment
- ❖ Recycle 87% of construction waste

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Property's Green Features:

- ❖ Ultra efficient elevators
- ❖ Largest green roof in Texas
- ❖ Rainwater collection system
- ❖ Whole building HEPA filtration system
- ❖ High efficiency HVAC system
- ❖ High performance glass and glazing system

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LEED vs Non-LEED Bottom Line

9 Year Proforma using ARGUS Software

LEED

- ❖ Base Rate: \$23.00
- ❖ Expenses: \$4.58
- ❖ Effective Rate: \$27.58
- ❖ Hard and Soft Costs: \$12,077,363
- ❖ Net Cash From Sale: \$7,671,294
- ❖ Unleveraged PV: \$2,980,083
- ❖ Unleveraged Annual IRR: 10.62%
- ❖ Leveraged Annual IRR: 16.64%

Non - LEED

- ❖ Base Rate: \$18.00
- ❖ Expenses: \$8.11
- ❖ Effective Rate: \$26.11
- ❖ Hard and Soft Costs: \$11,117,363
- ❖ Net Sales Proceeds: \$5,146,857
- ❖ Unleveraged PV: \$790,095
- ❖ Unleveraged Annual IRR: 8.0%
- ❖ Leveraged Annual IRR: 9.57%

Financing: 72% of Hard & Soft Costs.
7.2% Interest Rate, 20 Yr Amortization.

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Video Produced by Momentum Bay Associates:



[Click Here to See Video](#)

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"The results are in, and all those green building developers have reason to crow." - Business Week Online, 4/3/08.

"CoStar's new statistics show that most project cost increases are justified by the return an owner can expect on the completed project." - Shannon Sentman, LEEP-AP, Holland and Knight LLP, for the U.S. Green Building Council National Capital Region Chapter's Capital Update newsletter, 3/08.

"We're finding that building green buildings is good for the commercial leasing business. Buildings that carry LEED or Energy Star certifications have been shown to have higher occupancy rates and lease for more dollars per square foot than their peers." - San Francisco Mayor Gavin Newsome, citing the CoStar Green Building Study in testimony to the Select Committee on Energy Independence and Global Warming, 5/14/08.