

Morgan Lewis

together

Green Building Retrofits: Incentives and Considerations

Jeannine Bishop: Partner, Real Estate Practice, **Morgan Lewis**

Brad Molotsky: LEED GA, Executive Vice President, General Counsel and Secretary, **Brandywine Realty Trust**

Brett Stevens: LEED AP, Director of Sustainability, **IEI Group**

Matt Weko: LEED AP, Senior Vice President, Project & Development Services, **Jones Lang LaSalle**

Disclaimer

- This communication is provided as a general informational service to clients and friends of Morgan, Lewis & Bockius LLP. It should not be construed as, and does not constitute, legal advice on any specific matter, nor does this message create an attorney-client relationship.

Morgan Lewis

together

Green Building and Sustainable Development: An Overview

Brett Stevens, LEED AP
Director of Sustainability, IEI Group



USGBC Overview

- The United States Green Building Council (USGBC) is a nonprofit organization committed to sustainable buildings and communities to promote healthy and socially responsible environments.
- USGBC's Roles:
 - Educate
 - Steward Market Transformation
 - Provide Tools & Expertise
 - Forum for Industry Dialogue
 - Build Community



Levels of LEED Ratings

Green Buildings worldwide are certified with a voluntary, consensus-based rating system.

USGBC has Four Levels of LEED®:

- Platinum
- Gold
- Silver
- Certified

Scores are tallied for different aspects of efficiency and design in appropriate categories.

For instance, LEED assesses in detail:

1. Sustainable Site
2. Water Efficiency
3. Energy & Atmosphere
4. Material & Resources
5. Indoor Environmental Air Quality
6. Innovation & Design Process
7. Regional Priority



Energy Star for Existing Buildings Overview

- Rate energy performance on a scale of 1-100 relative to similar buildings nationwide using EPA's Portfolio Manager. Buildings rating 75 or greater may qualify for the ENERGY STAR.

- **Portfolio Manager:**
 - Streamline your portfolio's energy and water data
 - Track key consumption
 - Measure performance
 - Monitor costs



Sustainability Overview

Benefits to Your Company:

- Financial
- Health/Wellness
- Productivity
- Resale/Lease Rate
- Publicity/Marketing



Sustainability Overview

Environmental Benefits:

- Reduce Energy
- Reduce Water Consumption
- Reduce Waste
- Emit Less Carbon Dioxide
- Improve Indoor Air Quality



LEED Soft Cost Considerations

- LEED Registration and Certification
- LEED Documentation
- Additional LEED Design Work
- Energy Modeling
- Commissioning



Sustainability Initiatives

Within the Workplace:

- LEED Certification
- Green Office Policies
- Employees want “Green Space”
- CEO and Executive Mandate across the United States and International Real Estate and Operations
- Customers are asking, “What are your sustainability policies?”



Morgan Lewis

together

Green Building Retrofits: Market Snapshot

Matt Weko, LEED AP
Senior Vice President
Project and Development Services



JONES LANG
LASALLE®

www.morganlewis.com

Green Gauge – Q1 2011

Philadelphia MSA – Green Office Buildings

	Current Philadelphia MSA Office Supply (1,207 properties)			Current Philadelphia MSA Green Buildings (84 properties)		
		Previous 12 Months	12 month outlook		Previous 12 Months	12 month outlook
Stock	112,216,146 s.f.	↑	→	25,439,261 s.f.	↑	↑
Overall vacancy	16.9%	↑	↓	14.1%	↑	↓
YTD net absorption	161,692 s.f.	↑	↑	18,421 s.f.	↑	↑
Under construction or renovation	0 s.f.	↓	↑	400,000 s.f.	↑	↑
Average rent	\$22.68 p.s.f.	↓	→	\$26.69 p.s.f.	↑	↑

Inventory: Class A and B buildings with 25,000 square feet and greater.

Excludes: Owner-occupied and Medical Office Buildings.

Green: Defined as either LEED or Energy Star certified.

■ Positive change
 ■ Neutral change
 ■ Negative change

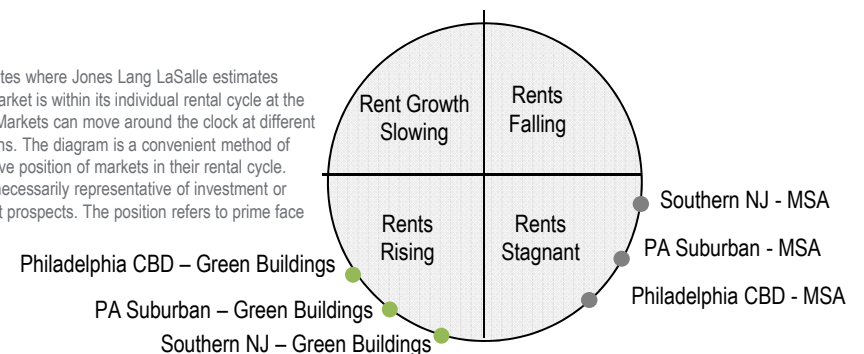
Arrows indicate direction of change.

Market conditions

- 84 “Green” Office Buildings in the Philadelphia MSA
- 23 CBD – Class A Office Buildings
- 2 CBD – Class B Office Buildings
- 39 PA Suburban – Class A Office Buildings
- 12 PA Suburban – Class B Office Buildings
- 4 Southern NJ – Class A Office Buildings
- 2 Southern NJ – Class B Office Buildings

Clock description

- This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions. The diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values.



Green Gauge – Q1 2011

Philadelphia CBD – Green Office Buildings

	Current Philadelphia MSA Office Supply (79 properties)			Current Philadelphia MSA Green Buildings (25 properties)		
		Previous 12 Months	12 month outlook		Previous 12 Months	12 month outlook
Stock	26,008,634 s.f.	→	→	28,544,201 s.f.	↑	↑
Overall vacancy	11.1%	↓	↓	14.1%	↑	↓
YTD net absorption	35,573 s.f.	↑	↑	54,340 s.f.	↑	↑
Under construction or renovation	0 s.f.	→	→	0 s.f.	→	→
Average rent	\$24.51	↓	↑	\$27.26	↑	↑
Class A asking rent	\$26.18	↓	↑	\$27.73	↑	↑
Class B asking rent	\$22.71	↑	→	\$21.14	↓	→

■ Positive change
 ■ Neutral change
 ■ Negative change

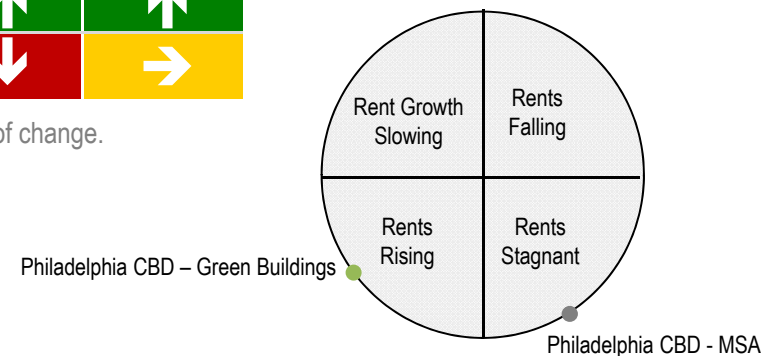
Arrows indicate direction of change.

Property Set

- 23 CBD – Class A Office Buildings
- 2 CBD – Class B Office Buildings
- **Inventory:** Class A and B buildings with 25,000 square feet and greater.
- **Excludes:** Owner-occupied and Medical Office Buildings.
- **Green:** Defined as either LEED or Energy Star certified.

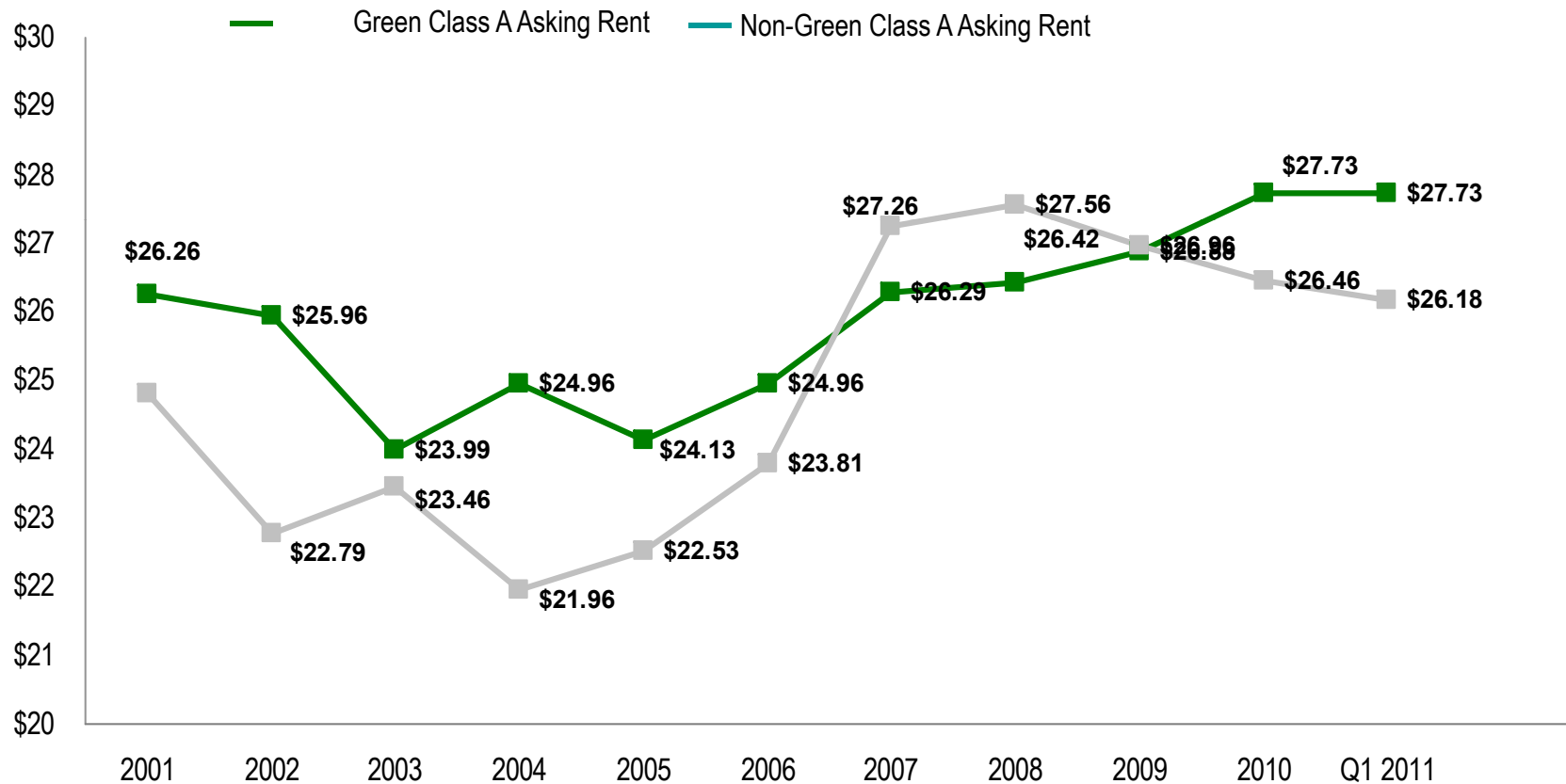
Clock description

- This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions. The diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values.



Green Gauge – Q1 2011

Philadelphia CBD – Class A historical asking rental rates



Green Gauge – Q1 2011

Pennsylvania Suburbs – Green Office Buildings

	Current Philadelphia MSA Office Supply (754 properties)			Current Philadelphia MSA Green Buildings (51 properties)		
		Previous 12 Months	12 month outlook		Previous 12 Months	12 month outlook
Stock	57,048,860 s.f.	↑	→	6,171,562 s.f.	↑	↑
Overall vacancy	19.0%	↑	↓	13.9%	↑	↓
YTD net absorption	267,505 s.f.	↑	↑	-39,326 s.f.	↑	↑
Under construction or renovation	0 s.f.	↓	→	400,000 s.f.	↑	↑
Average asking rent	\$23.14	↓	↑	\$26.47	↑	↑
Class A asking rent	\$25.41	↓	↑	\$28.38	↑	↑
Class B asking rent	\$21.13	↓	→	\$22.34	↑	↑

■ Positive change
 ■ Neutral change
 ■ Negative change

Arrows indicate direction of change.

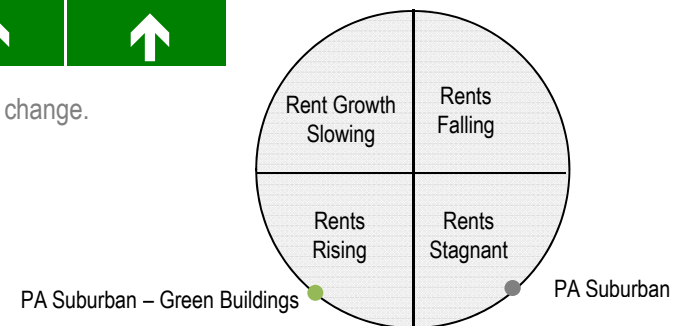
Property Set

- 39 PA Suburban – Class A Office Buildings
- 12 PA Suburban – Class B Office Buildings
- **Inventory:** Class A and B buildings with 25,000 square feet and greater.
- **Excludes:** Owner-occupied and Medical Office Buildings.
- **Green:** Defined as either LEED or Energy Star certified.

© Morgan, Lewis & Bockius LLP

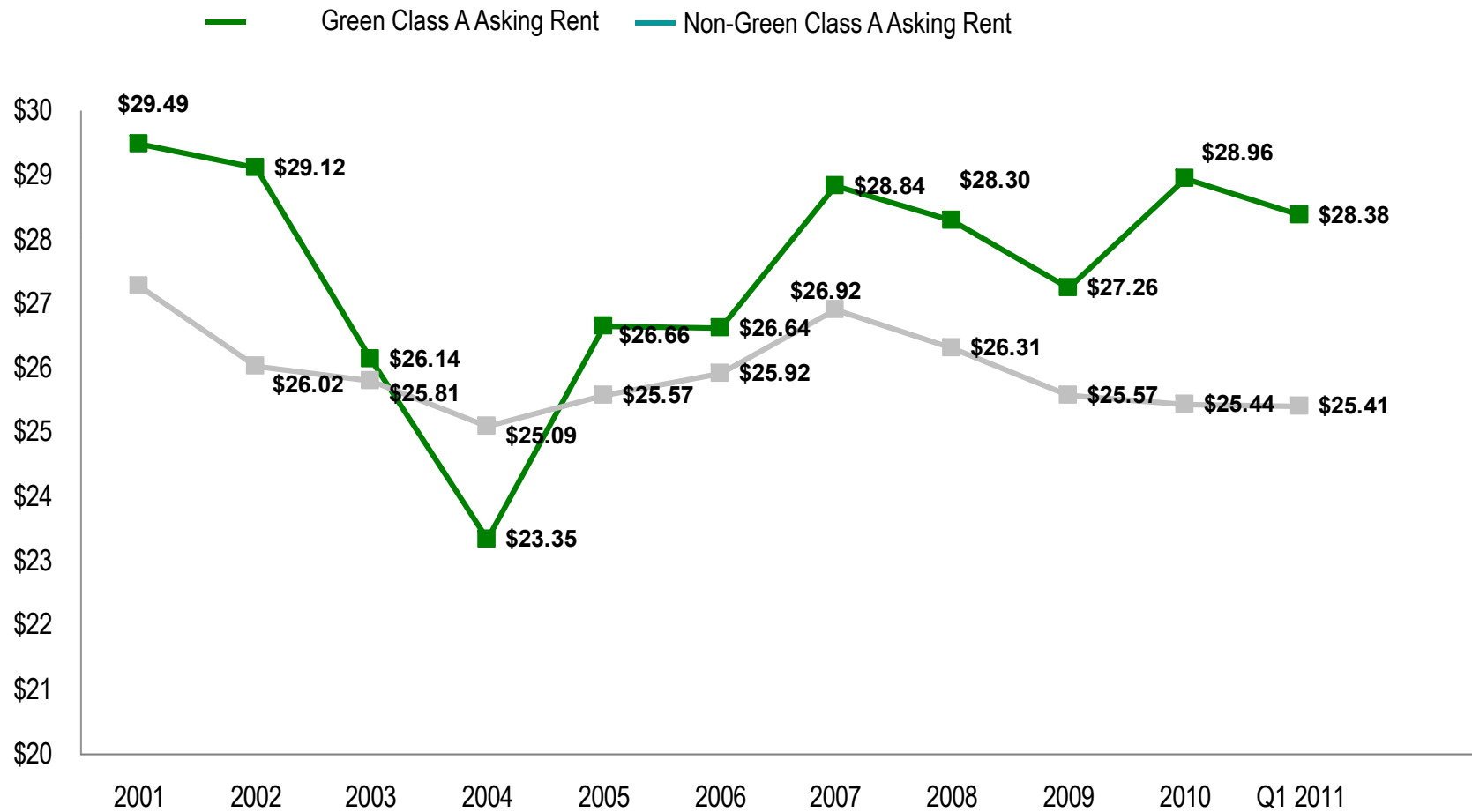
Clock description

- This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions. The diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values.



Green Gauge – Q1 2011

Pennsylvania Suburbs – Class A historical asking rental rates



Green Gauge – Q1 2011

Southern New Jersey – Green Office Buildings

	Current Philadelphia MSA Office Supply (754 properties)			Current Philadelphia MSA Green Buildings (51 properties)		
		Previous 12 Months	12 month outlook		Previous 12 Months	12 month outlook
Stock	57,048,860 s.f.	↑	→	6,171,562 s.f.	↑	↑
Overall vacancy	19.0%	↑	↓	13.9%	↑	↓
YTD net absorption	267,505 s.f.	↑	↑	-39,326 s.f.	↑	↑
Under construction or renovation	0 s.f.	↓	→	400,000 s.f.	↑	↑
Average asking rent	\$18.34	↓	↑	\$18.97	↑	↑
Class A asking rent	\$19.85	↓	↑	\$27.69	↑	↑
Class B asking rent	\$17.70	↓	→	\$14.62	↓	↑

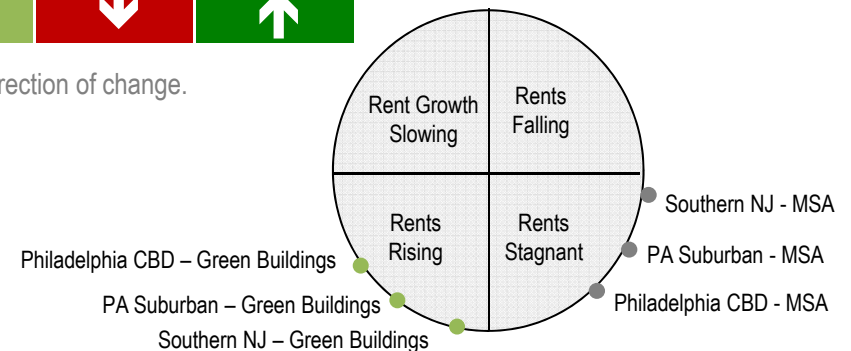
■ Positive change
 ■ Neutral change
 ■ Negative change
 Arrows indicate direction of change.

Property Set

- 4 Southern NJ – Class A Office Buildings
- 4 Southern NJ – Class B Office Buildings
- **Inventory:** Class A and B buildings with 25,000 square feet and greater.
- **Excludes:** Owner-occupied and Medical Office Buildings.
- **Green:** Defined as either LEED or Energy Star certified.

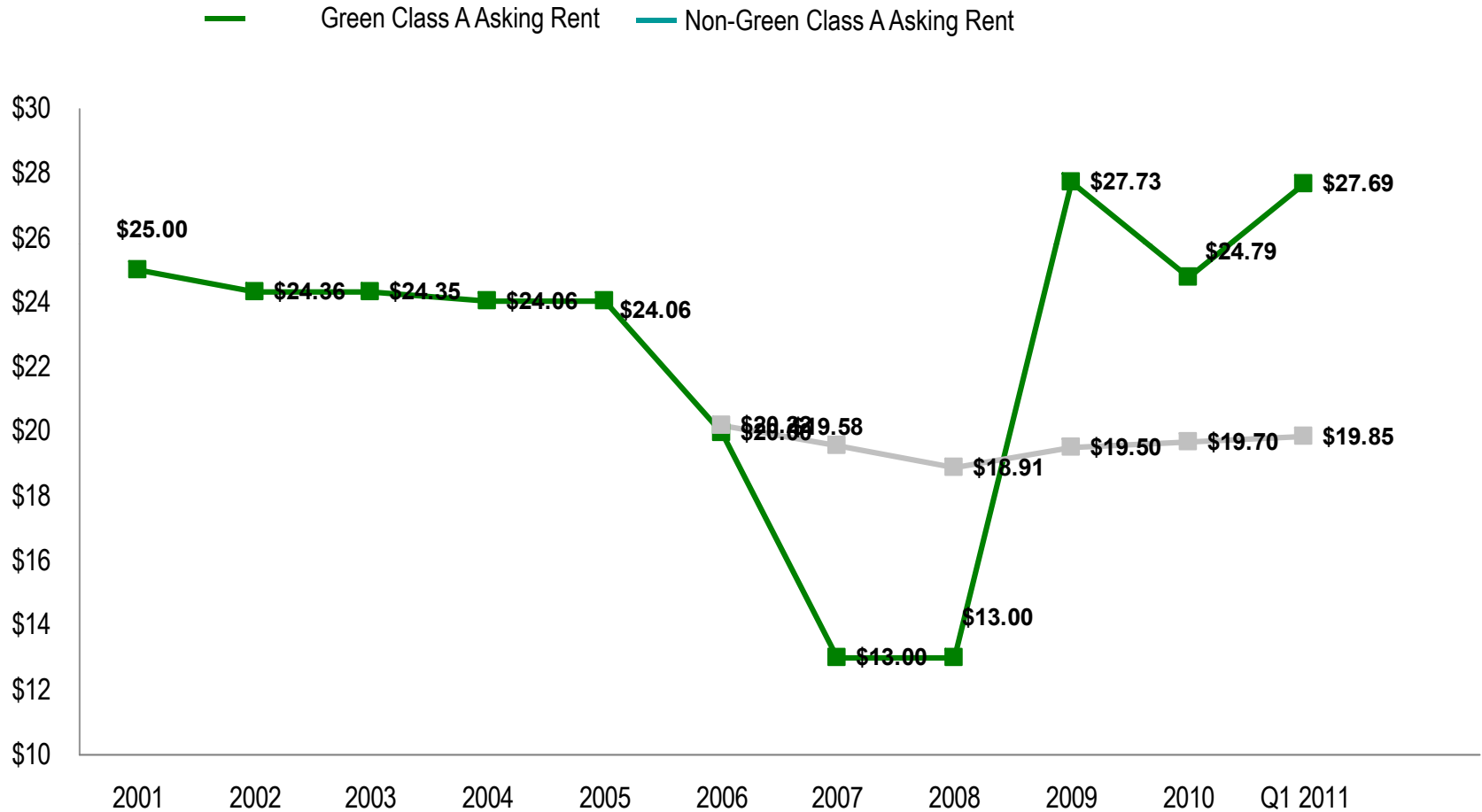
Clock description

- This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions. The diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values.



Green Gauge – Q1 2011

Southern New Jersey – Class A historical asking rental rates



Green Gauge – Q1 2011

Green vs. non-green new construction since 2007

	Current Philadelphia MSA Office Supply (43 properties)			Current Philadelphia MSA Green Buildings (15 properties)			Rental Rate Differences
		Previous 12 Months	12 month outlook		Previous 12 Months	12 month outlook	
Stock	2,950,665 s.f.	↑	→	4,015,120 s.f.	↑	↑	
Overall vacancy	29.1%	↑	↓	23.2%	↑	↓	
YTD net absorption	107,984 s.f.	↑	↑	45,774 s.f.	↑	↑	
Under construction or renovation	0 s.f.	↓	→	400,000 s.f.	↑	↑	
Average asking rent	\$26.48	↓	↑	\$33.12	↑	↑	\$6.64
Class A asking rent	\$26.86	↓	↑	\$33.84	↑	↑	\$6.98
Class B asking rent	\$23.37	↓	→	\$27.50	↑	↑	\$4.13

■ Positive change
 ■ Neutral change
 ■ Negative change

Arrows indicate direction of change.

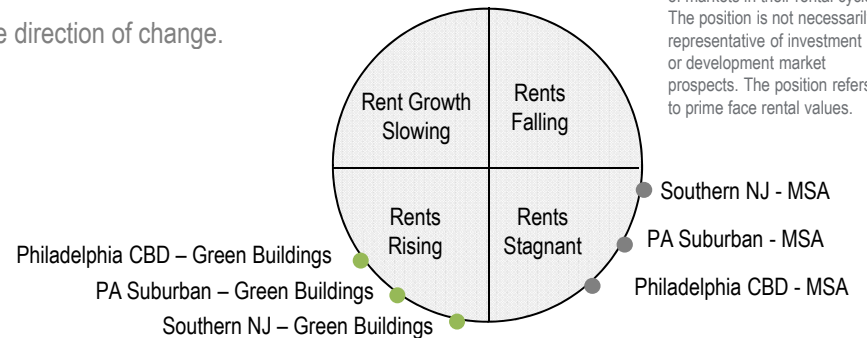
Property Set

- 39 PA Suburban – Class A Office Buildings
- 12 PA Suburban – Class B Office Buildings
- **Inventory:** Class A and B buildings with 25,000 square feet and greater.
- **Excludes:** Owner-occupied and Medical Office Buildings.
- **Green:** Defined as either LEED or Energy Star certified.

© Morgan, Lewis & Bockius LLP

Clock description

- This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions. The diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values.



Green Gauge – Q1 2011

Asking rental rates deltas by submarket

	Current Philadelphia MSA Office Supply (1,215 properties)			Current Philadelphia MSA Green Buildings (76 properties)			Rental Rate Differences
	Rental Rate	Previous 12 Months	12 month outlook	Rental Rate	Previous 12 Months	12 month outlook	
Philadelphia MSA Office	\$22.68 p.s.f.	↓	→	\$26.69 p.s.f.	↑	↑	\$4.01
CBD Class A	\$26.18 p.s.f.	↓	→	\$27.73 p.s.f.	↑	↑	\$1.55
CBD Class B	\$22.71 p.s.f.	↑	→	\$21.14 p.s.f. ¹	↑	→	-\$1.57
PA Suburbs Class A	\$25.41 p.s.f.	↓	→	\$28.38 p.s.f.	↑	↑	\$2.97
PA Suburbs Class B	\$21.13 p.s.f.	↑	→	\$22.34 p.s.f.	↓	↑	\$1.21
Southern NJ Class A	\$19.85 p.s.f.	↑	→	\$27.69 p.s.f.	↑	↑	\$7.84
Southern NJ Class B	\$17.70 p.s.f.	↑	→	\$14.62 p.s.f.	↓	↑	-\$3.08

■ Positive change
 ■ Neutral change
 ■ Negative change

Arrows indicate direction of change.

¹ There are only two (2) Class B Green buildings in the CBD. Vacancy is 9.9% (130,404 SF)

Morgan Lewis

together

Green Building Retrofits: Federal & State Incentives and Mandates

Brad Molotsky, LEED GA
Executive Vice President, General Counsel and Secretary, Brandywine
Realty Trust



www.morganlewis.com

Federal Tax Incentives

- Energy-efficient Commercial Buildings Deduction (Section 179D of the Internal Revenue Code)
- Overview:
 - A deduction is available for the cost of energy-efficient commercial building property placed in service before January 1, 2014
 - A partial deduction is allowed for energy-saving systems that are not part of a plan to reduce the building's energy consumption by 50 percent if the system reduces energy consumption by 16-2/3 percent or more
- Energy efficient commercial building property is property installed as part of the interior lighting systems; the heating, cooling, ventilation, and hot water systems; or the building envelope, as part of a plan to reduce the building's energy consumption by 50 percent or more.

Federal Tax Incentives

- Key Proposed Changes to Energy-Efficient Commercial Buildings Deduction (Section 179D of the Internal Revenue Code)
 - Allow owners or tenants to claim some incentive for improving a substantial space within a building
 - Make the tax incentive useable for a broad range of building efficiency stakeholders and building types, including Real Estate Investment Trusts (REITs) and multifamily buildings
 - Measure energy savings compared to the existing energy baseline
 - Consider supplemental incentives for retrofits that multiply energy efficiency benefits
 - Link the amount of the incentive to the energy savings achieved

Pending Federal Legislation

- The U.S. buildings sector consumes 72% of electricity, 55% of natural gas, and 40% of U.S. primary energy. Investments in building efficiency are among the most cost-effective, energy-saving measures we can make.
- Recent Development: Interim Rule Amending Federal Acquisition Regulation (FAR)
- S.1000, Energy Savings and Industrial Competitiveness Act of 2011 (ESIC) includes:
 - *Building Energy Codes*
 - *Goal of achieving net-zero-energy buildings by 2030*
 - *Adoption and enforcement is reserved for the states, but the Department of Energy (DOE) is empowered to offer technical assistance*
 - *Authorizes funding to incentivize and assist states to meet the model codes*

Pending Federal Legislation

- S.1000, Energy Savings and Industrial Competitiveness Act of 2011 (ESIC)
- Key Provision: Energy Efficiency Upgrades for Existing Buildings
 - Expands the DOE Loan Guarantee Program to include commercial, industrial, and MUSH (municipal, university, schools, and hospitals) building efficiency upgrades
 - Unlocks one of the key barriers to making efficiency upgrades to existing buildings by making access to capital easier through the DOE loan guarantee program
 - SAVINGS - A 2009 McKinsey & Company study found that an investment of \$73 billion by private entities in making existing commercial buildings more energy efficient would provide present-value savings of \$104 billion and save \$11 billion annually by 2020
- Key Provision: Industrial Incentives
 - The U.S. industrial sector consumes 30 percent of all energy used by our economy
 - Manufacturing Revolving Loan Funds
 - Manufacturing Partnerships with DOE
 - Supply Star
 - Electric Motor Rebate Program

Incentives: Pennsylvania

- **Act 129:** Legislation passed by Pennsylvania requiring energy efficiency programs throughout PA
- **Goal:** Reduce electric demand in PA, improving the environment and lowering costs to property owners
- **Scope:** Approximately \$67.4 million in energy-efficiency incentives are approved through May 31, 2013

Incentives: Pennsylvania

- Prescriptive Incentives:
 - Property owner installs energy-efficient equipment and receives an incentive when he or she reaches predetermined savings and incentive levels
- Eligible Prescriptive Measures:
 - Heating, Ventilation and Air Conditioning (HVAC)
 - Lighting
 - Motors
 - Refrigeration

Incentives: Pennsylvania

- Pennsylvania Incentives: Custom Incentives
 - Custom Incentives: These incentives are determined on a case-by-case basis and are paid per unit of energy saved.
 - *Note: Projects that are on the prescriptive measures list are not eligible for custom incentives even if the calculated incentive is greater.*

Incentives: Pennsylvania

- Eligible Custom Measures:
 - Process equipment improvements
 - New air compressors or controls
 - Refrigeration controls
 - Additional cooling tower capacity
 - “Free Cooling”
 - Heat recovery
 - Cool roofs or shading

Incentives: Pennsylvania

- PA Incentives DO NOT Cover:
 - Renewable energy sources
 - On-site generation
 - Repairs, replacement of unused equipment
 - Design or consulting services (except energy audits for governmental, institutional, and nonprofit customers)
 - Internal labor

Incentives: Resources

- Database for State Incentives for Renewables and Efficiency (DSIRE): DSIREusa.org
- Greenworks Philadelphia:
<http://www.phila.gov/green/greenworks/>
 - Greenworks Loan Fund:
<http://philadelphiaretail.com/pdf/GreenWorksLoanFund.pdf>

Morgan Lewis

together

Green Building Retrofits: Legal Considerations



Brad Molotsky, LEED GA
Executive Vice President, General Counsel and Secretary, Brandywine Realty Trust



Jeannine Bishop
Partner, Real Estate Practice, Morgan, Lewis & Bockius LLP



Legal Considerations

- Commercial leases are being revised to address various green leasing issues
- Various organizations have model green leases for purchase, such as the Building Owners and Managers Association (BOMA) and Realpac (Canada)
- Many landlords have updated their form leases to address some of the considerations contained in these model green leases and to address other green leasing issues directly affecting their properties

Will Rent Numbers Change?

- The real issue – does adding green provisions increase rent?
- To determine, the parties need to check proposed changes to Operating Expenses
- Review the allocation of the costs of the initial greening of the building (i.e. getting LEED certification) and the continued cost of maintaining such certification
 - For example, should certain costs be excluded from the base year?
 - Should certain costs be considered capital expenditures?

Specific Greening Costs

- To determine whether the allocation is reasonable, look at the costs being incurred and included in OpEx
- One area that leads to heavy negotiation is energy savings expenditures and if they should be included in OpEx provisions in the Lease:
 - Lights (replacing existing fixtures and considering motion based fixtures)
 - Water (plumbing, fixtures, and landscaping -from flow restrictions to recycled water for landscaping)

Specific Greening Costs

- Recycling Programs (will they increase vendor costs for pick-up and how to address?)
- Window treatments (shades/blinds)
- Energy Star equipment
- Keeping the building at a specific LEED certification level and costs associated with the same
- Result of Negotiations: How have landlords started to treat these costs and what has tenant response been thus far?

Green Cleaning Requirements

- Green cleaning requirements should also be considered, as they are frequently added to OpEx
 - What requirements are changing and how costly has it been?
 - Pest management services – What is changing?
 - Positive impacts of same – Green upgrades lead to happier tenants as well as positive environmental impact
 - Cost impact – Often, upgrades across properties can lead to savings

Tenant Considerations

- For big-box and other major tenants, if a specific LEED certification is essential, requirements that a building be and remain at a certain level need to be addressed in the lease
- Remaining at a specific level is a challenge for landlords as they do not know the future requirements of staying at such a level (it may change every 3 years)
 - Tenants may need to comply with specific restrictions to maintain compliance as well
- Consider approving a certain level at a known point in time and using reasonable efforts for future obligations

General Green Lease Reactions

- What is the general reaction in the marketplace?
- What should landlords expect to be a tenant cost, and what should be a landlord cost?
- If the tenant is not paying, how are landlords addressing not sharing later savings?
- What is next in green leasing???

Q&A

- If we do not have an opportunity to answer your questions during the webcast, we will follow up with you shortly after the webcast concludes.

Contact Information

- **Jeannine Bishop:** Partner, Real Estate Practice, Morgan Lewis
 - Phone: 215.963.5204
 - Email: jtbishop@morganlewis.com
- **Brad Molotsky:** LEED GA, Executive Vice President, General Counsel and Secretary, Brandywine Realty Trust
 - Phone: 610.832.4908
 - Email: Brad.Molotsky@bdnreit.com
- **Brett Stevens:** LEED AP, Director of Sustainability, IEI Group
 - Phone: 215.413.3700, ext. 128
 - Email: bstevens@ieigroup.com
- **Matt Weko:** LEED AP, Senior Vice President, Project & Development Services, Jones Lang LaSalle
 - Phone: 215.988.5596
 - Email: matt.weko@am.jll.com



international presence

Beijing Boston Brussels Chicago Dallas Frankfurt Harrisburg Houston Irvine
London Los Angeles Miami New York Palo Alto Paris Philadelphia Pittsburgh
Princeton San Francisco Tokyo Washington Wilmington