

Thanks for tuning in to the webcast, we will begin shortly!

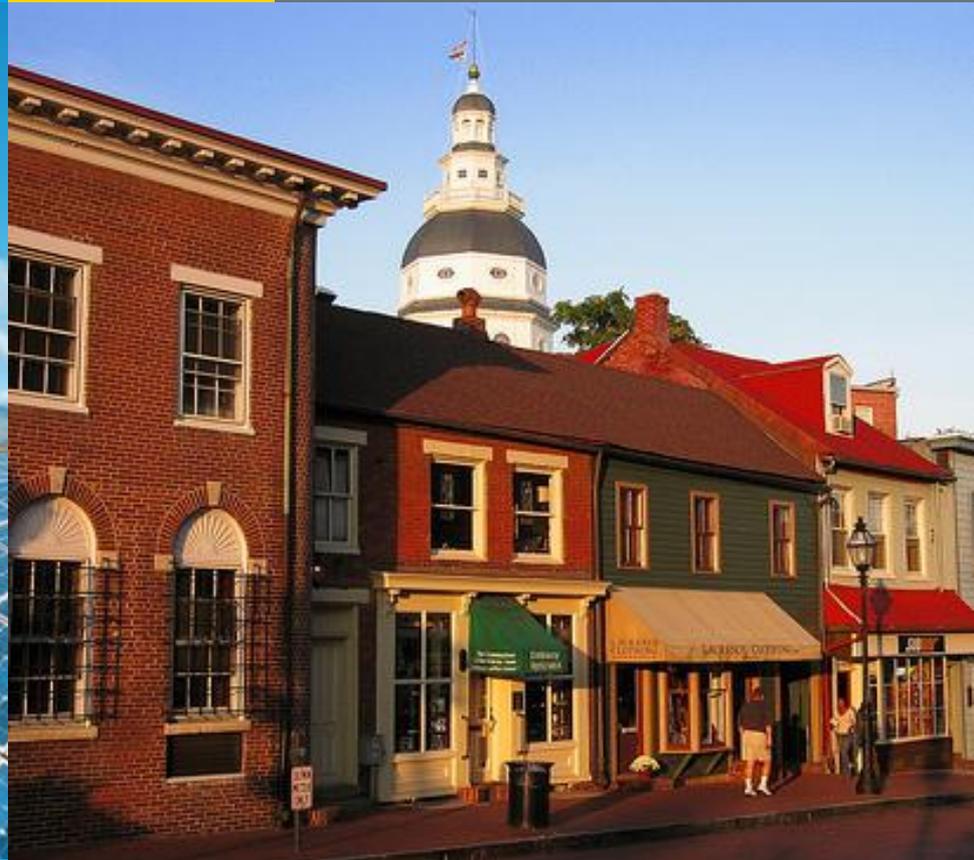
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Energy Disclosure and Leasing Standards: Best Practices

November 21, 2011

Joel Blaine, DOE

This presentation is brought to you by DOE's Technical Assistance Program (TAP) in collaboration with the Environmental Protection Agency.

TAP supports the Energy Efficiency and Conservation Block Grant Program (EECBG) and the State Energy Program (SEP) by providing state, local, and tribal officials the tools and resources needed to implement successful and sustainable clean energy programs.



Explore our online resources via the [Solution Center](#)

Ask questions via our call center at 1-877-337-3827 or email us at solutioncenter@ee.doe.gov

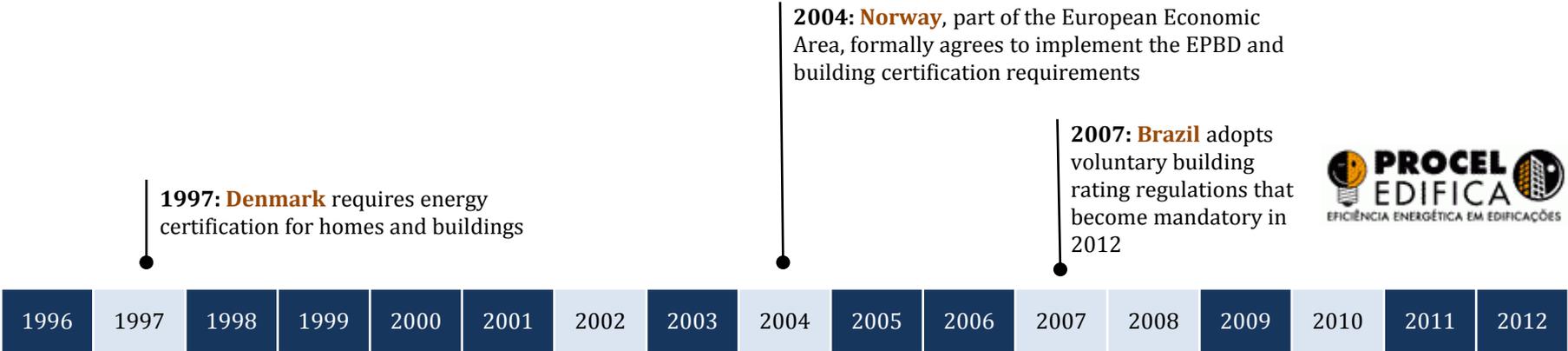
Commercial Energy Benchmarking and Disclosure Policy: State, Local and Federal Overview

November 21, 2011

Caroline Keicher
Program Manager, Building Energy Rating Program
Institute for Market Transformation
caroline@imt.org



International Labeling Policy



1997: Denmark requires energy certification for homes and buildings

2004: Norway, part of the European Economic Area, formally agrees to implement the EPBD and building certification requirements

2007: Brazil adopts voluntary building rating regulations that become mandatory in 2012



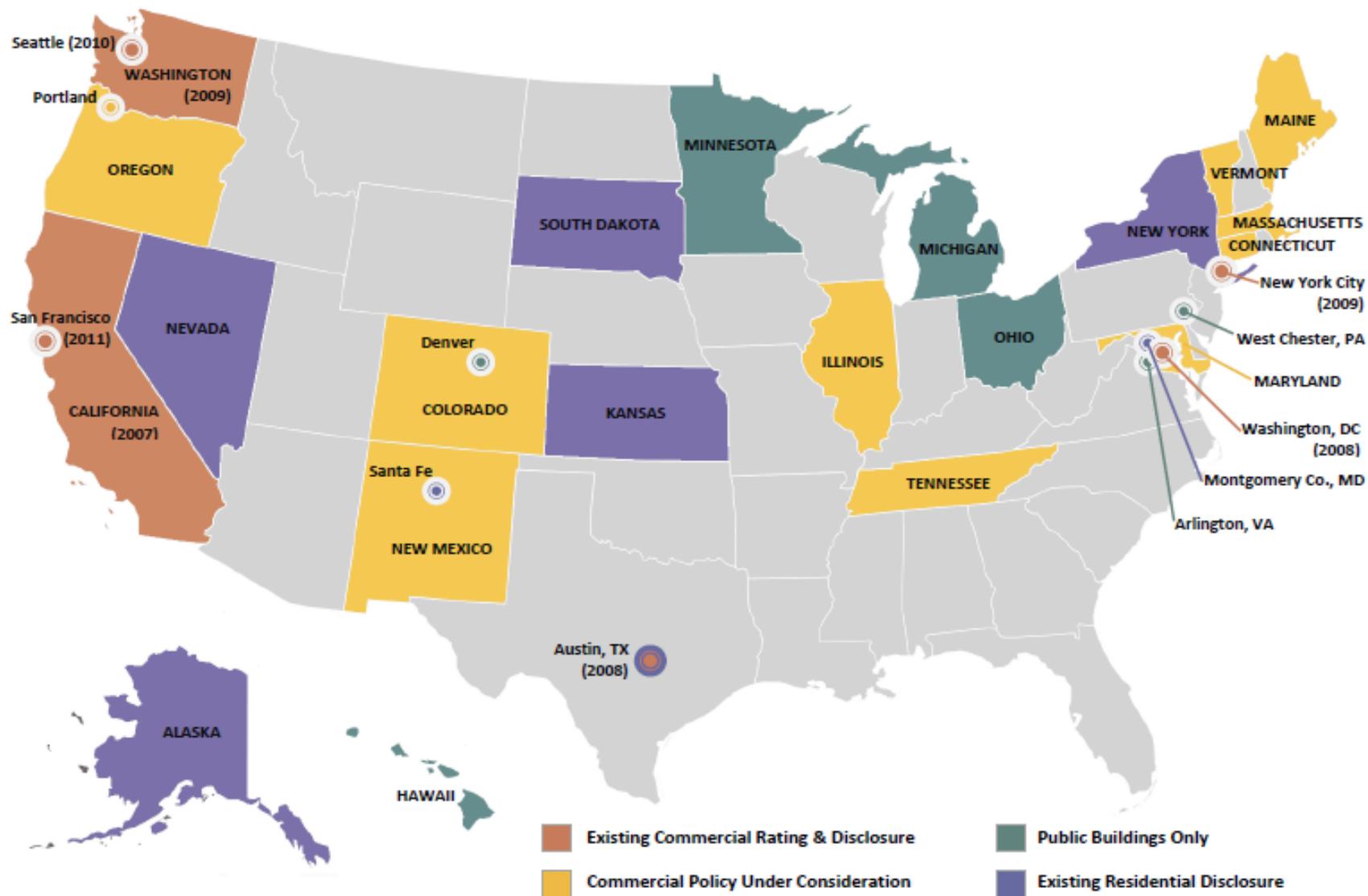
2002: The European Parliament adopts the Energy Performance of Buildings Directive (EPBD), requiring all **EU Member States** to establish mandatory energy certification schemes for homes and buildings

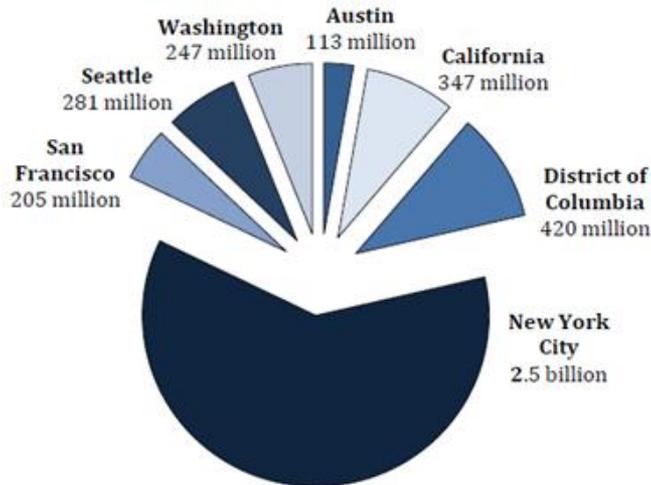


2008: China adopts a mandatory energy rating program for government buildings. **Turkey** adopts a mandatory certification scheme

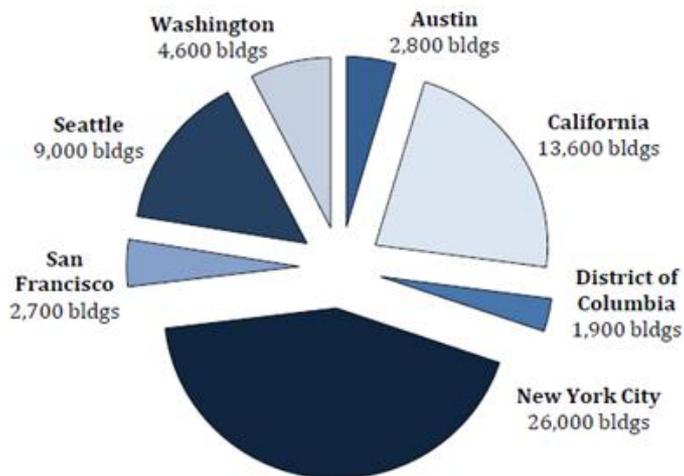
2010: **Australia** adopts a mandatory building certification scheme

U.S. Policy Map, State and Local





Policy Impact Projection on Building Area (in Square Feet) by Jurisdiction



Policy Impact Projection on Number of Buildings by Jurisdiction

- **U.S. policies leverage ENERGY STAR Portfolio Manager benchmarking**
 - Simplest, most cost-effective tool available
 - Real estate industry is using voluntarily

- **Seven U.S. jurisdictions have enacted policies**
 - Affect 60,000+ buildings, ~4 billion SF
 - All policies begin phasing in 2011- 2012
 - Policy standardization a mixed-bag
 - Learning curve: Utility data access, outreach, compliance, enforcement

- **Continued interest from states and cities**
 - Driven by interest in existing buildings
 - New incentives are difficult given budget cuts and ramping-down of ARRA funds
 - Market transparency attractive to both parties
 - Policymakers want the data

Policy Requirements by Jurisdiction

Jurisdiction	Benchmarking (Building Type and Size)		Disclosure					
	Non-residential	Multi-family	On public web site	To local government	To tenants	To transactional counterparties		
						Sale	Lease	Financing
Austin	10k SF+	-	-	✓	-	✓	-	-
California*	1k SF+	-	-	✓	-	✓	✓	✓
District of Columbia	50k SF+	50k SF+	✓	✓	-	-	-	-
New York City	50k SF+	50k SF+	✓	✓	-	-	-	-
San Francisco	10k SF+	-	✓	✓	✓	-	-	-
Seattle	10k SF+	5+ units	-	✓	✓	✓	✓	✓
Washington	10k SF+	-	-	-	-	✓	✓	✓



Ridgewood Capital

“I tell our green startup companies to focus on San Francisco or New York City. That’s where the action is going to be.” - **Elton Sherwin, venture capitalist, senior managing director, Ridgewood Capital**



“When clients get their benchmarking results, they start asking questions – ‘Why did my building get this score and what can I do to improve it?’” – **Lindsay Napor McLean, Exec. VP and COO, Ecological**

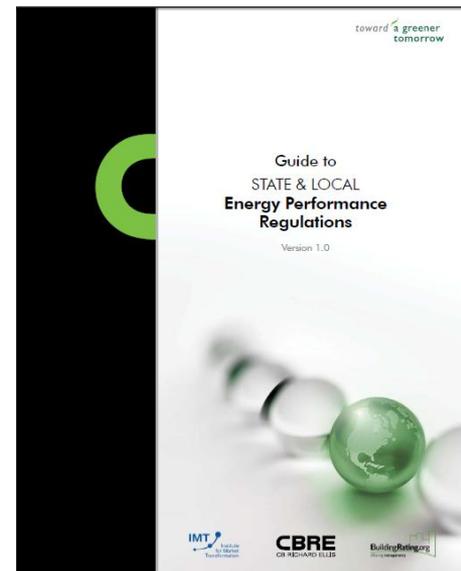
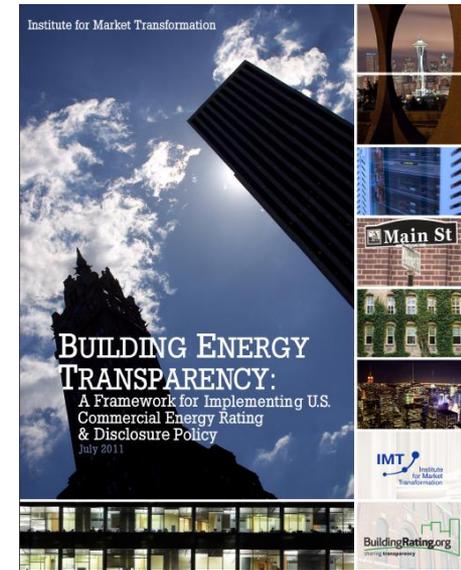
“... a great way for us to go to the folks who are already primed for what we’re doing.” – **Jeffrey Perlman, founder & CEO, BrightPower, CEO, EnergyScoreCards Inc.**

- **Business up by 30%** at BuildingWise (San Francisco) and Sustainable Real Estate Solutions (Conn.)
- Ecological has **doubled staff and added 400 clients** in past 12 months
- **Benchmarking policies resulting in direct job growth** and expected to fuel and sustain the pipeline for audits, RCx, operational improvements and retrofits
- Unlocking organic demand, not manufacturing demand as incentives can do

- **Related Federal Initiatives**
 - **DOE** – National Building Rating Program, work with ARRA grantees
 - **EPA** – ENERGY STAR Portfolio Manager support
 - **Administration** – Better Buildings Initiative
 - **GSA** – Federal Green Leasing Requirements

- **National Landscape**
 - Policies need standardization and guidance
 - IMT convened states and cities in 2010 to discuss coordination and standardization
 - Published first national framework for implementing policies in Aug. 2011
 - Second event and follow-up report in 2012, will include industry participation

- **Resources**
 - CB Richard Ellis Guide to State & Local Energy Performance Regulations (Aug. 2011)
 - BuildingRating.org (IMT, NRDC)



Thank you

Please feel free to contact me with any questions

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www.imt.org

www.buildingrating.org



Leveraging EPA's Portfolio Manager in Benchmarking and Disclosure Policy

Leslie Cook

US EPA

ENERGY STAR Commercial Buildings



Learn more at energystar.gov

State and Local Energy Benchmarking Policies on the Rise



- State and local energy benchmarking and disclosure policies on the rise.
- Purpose of these laws:
 - Increase transparency of building performance data for a better informed market (energy and water)
 - Incentivize improvements in public and private building
 - Grow clean energy job market
- All of the jurisdictions with benchmarking laws have specified the use of the U.S. Environmental Protection Agency's ENERGY STAR Portfolio Manager tool

EPA's Portfolio Manager



- Energy and water management for all commercial and multi family buildings
- Receive an energy use intensity (EUI). Many buildings, including office buildings can receive energy performance scores on a 1-100 scale.
- Track changes in energy and water use over time in single buildings, groups of buildings, or entire portfolios.
- Track and report cost savings and CO₂ emissions.
- Measure water indoor/outdoor water consumption.
- Apply for the ENERGY STAR.

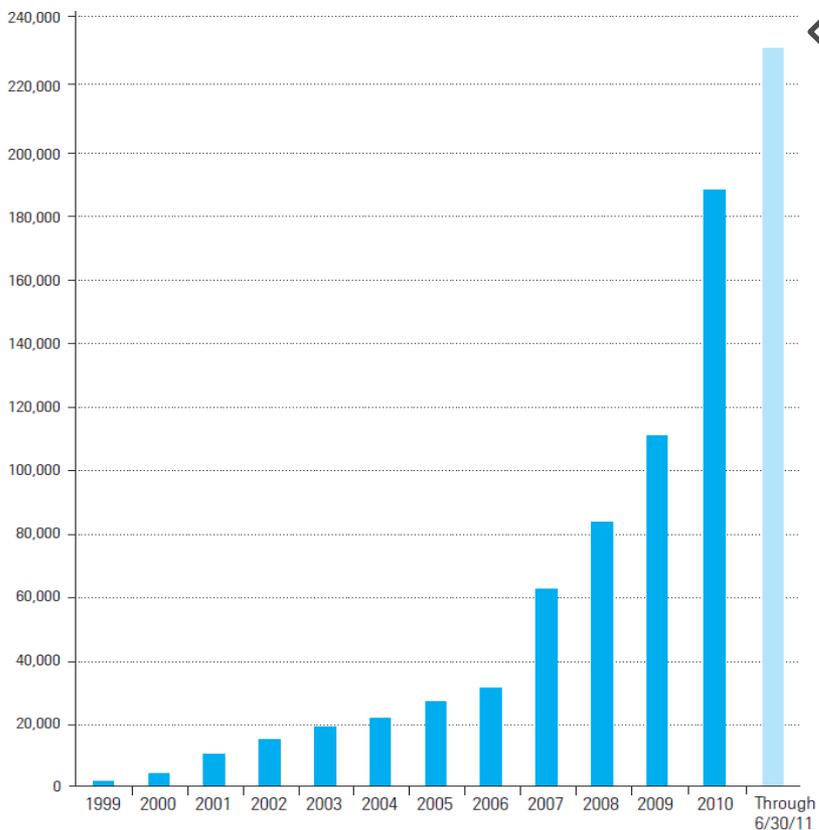
www.energystar.gov/benchmark



Benchmarking Activity in EPA's Portfolio Manager Continues to Increase

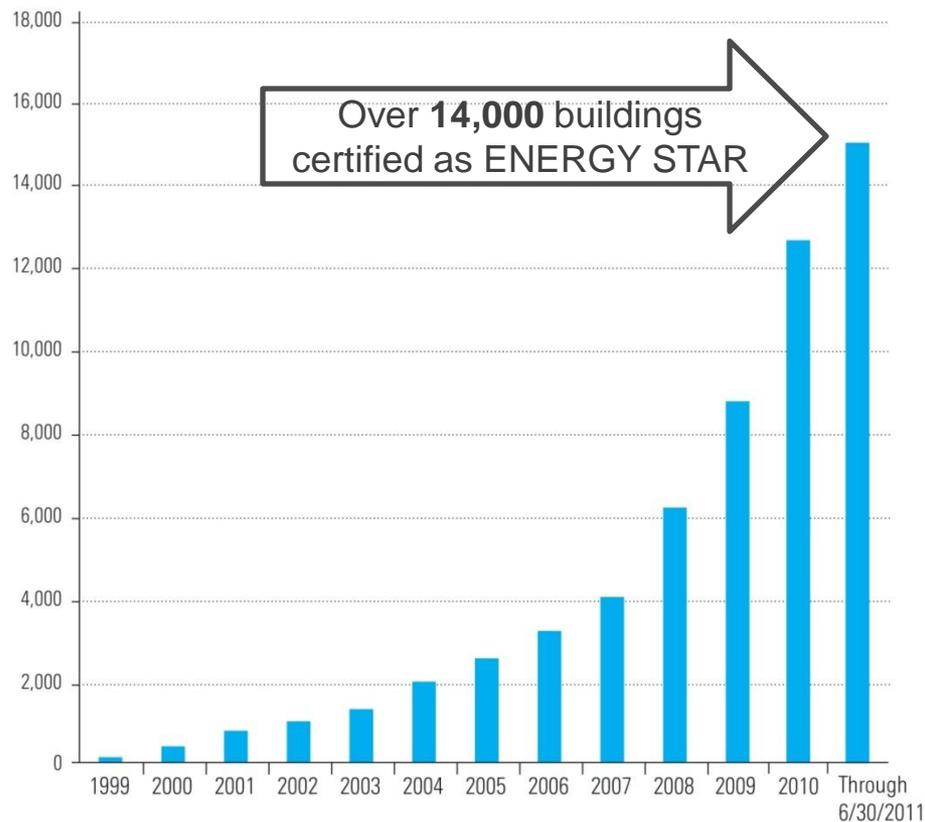


Commercial Buildings Benchmarked (cumulative)



Over **230,000** buildings benchmarked

ENERGY STAR Certified Buildings (cumulative)



Over **14,000** buildings certified as ENERGY STAR

Why Policy Makers are Choosing EPA's Portfolio Manager



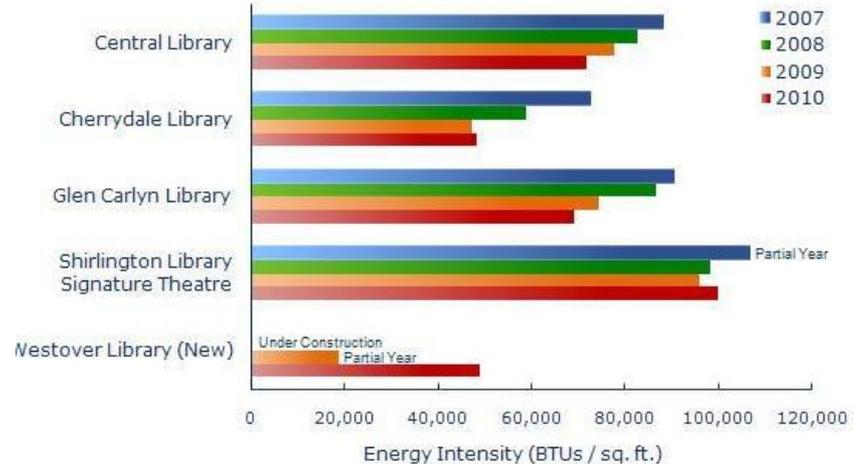
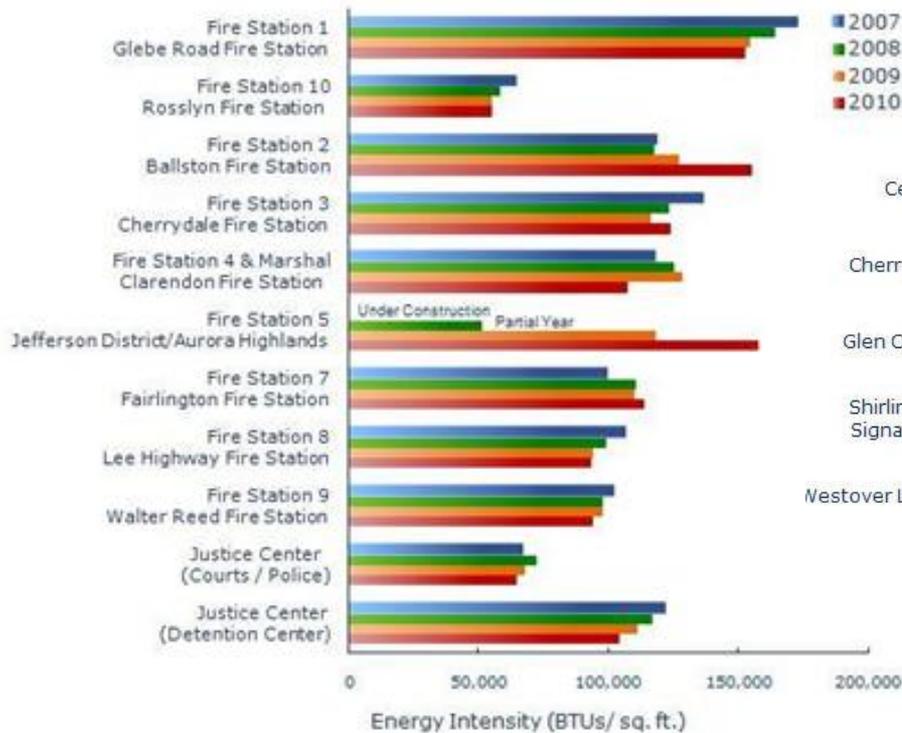
- Implement policy with one consistent tool that provides an accessible, consistent measurement platform
- Deliver key whole building energy performance based on utility data
- Build upon existing market adoption of EPA's Portfolio Manager
- Utilize the tools data sharing options available to facilitate disclosure of benchmarking results.

Verify Improvements... and Communicate Them!



Arlington County's Building Energy Report Cards

Site Energy Intensity by Building



More about the Arlington County's Building Energy Report Cards:
www.arlingtonva.us/portals/topics/aire/page66219.aspx



Verify Improvements... and Communicate Them!



Home District Commitment District Performance STAR Performers Teachers Kids Training Login Contact Us

ENERGY STAR Schools

We are the FIRST school district to get 100% of our schools ENERGY STAR Certified and displaying the prestigious ENERGY STAR Building Label. Any school that scores 75 or above is a top performer and qualifies for the ENERGY STAR label. However, certification is not granted without the verification of a third-party professional engineer. The audit confirms that the reported rating is legitimate and that saving energy does not compromise the school's learning environment.

ENERGY STAR Rating for August 2011

School	60	75	100	Score
East Gresham Elementary School	Red	Yellow	Green	100
Powell Valley Elementary School	Red	Yellow	Green	100
Deep Creek Elementary School	Red	Yellow	Green	99
Hollydale Elementary School	Red	Yellow	Green	96
West Orient Middle School	Red	Yellow	Green	96
Highland Elementary School	Red	Yellow	Green	95
West Gresham Elementary School	Red	Yellow	Green	95
Gordon Russell Middle School	Red	Yellow	Green	95
North Gresham Elementary School	Red	Yellow	Green	95
Kelly Creek Elementary School	Red	Yellow	Green	95
Clear Creek Middle School	Red	Yellow	Green	94
Hogan Cedars Elementary School	Red	Yellow	Green	91
Barlow High School	Red	Yellow	Green	91
Dexter McCarty Middle School	Red	Yellow	Green	91
Damascus Middle School	Red	Yellow	Green	89
East Orient Elementary School	Red	Yellow	Green	87
Hall Elementary School	Red	Yellow	Green	84
Gresham High School	Red	Yellow	Green	84
Springwater Trail High School	Red	Yellow	Green	82

Energy Center® is a licensed product of NET • New Energy Technology, Inc. • 1-800-260-7103

Gresham-Barlow School District's "Energy Center"

District Commitment District Performance STAR Performers Teachers Kids Training Login Contact Us

Saving Jobs

Our Energy Savings Funds 27 Teachers' Jobs!

Gresham-Barlow School District - Avoided Cost for Year Ending 6/2010

	Electric	Natural Gas	Total
Current Cost	\$981,987.00	\$449,433.00	\$1,431,420.00
Baseline Cost	\$1,999,177.00	\$962,614.00	\$2,961,791.00
Cost Savings	\$1,017,190.00	\$513,181.00	\$1,530,371.00

More about Gresham-Barlow School District's "Energy Center":
www.gbsdenergycenter.com



Tap Into EPA Resources



- Technical guidance for policy makers on implementing programs that include Portfolio Manager
- Portfolio Manager training support for building owners in the commercial and multifamily markets
- Resources to help engage your area's Utility and Energy Efficiency Service Providers
- Tools to help building owners improve their energy performance with cost-effective best practices



For More Information

Visit www.energystar.gov/government

E-mail buildings@energystar.gov

If you have any questions, please contact:

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(202) 343-9174

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Green Leasing Overview

Adam Sledd

Program Manager

Green Leasing and Federal
Buildings Program

Institute for Market Transformation

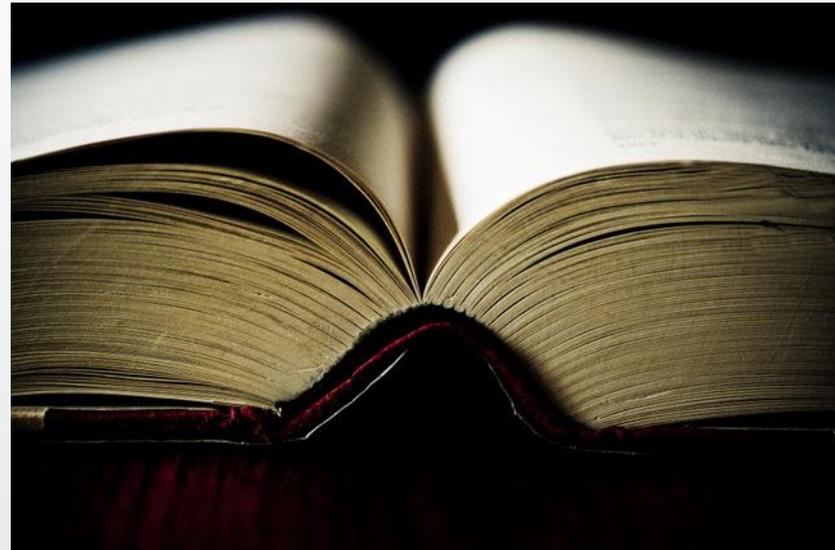
November 8, 2011

What Is Green Leasing?

Basic Definition:

A lease in which landlord and tenant agree to include sustainability concepts, and assign costs and benefits of sustainability improvements.

The goal is to align incentives to minimize “split incentive” problem.



Courtesy of Flickr user: Bob AuBuchon

Types of Leases

Full Service/Gross

- Landlord responsible for all taxes, maintenance, utilities, and insurance

Modified Gross/Net

- Landlord and tenants share operating expenses, often through base year or expense stop provision.
- Tenant may pay for own utilities, or may only cover increased operating expenses.

Triple Net

- Landlord passes all operating expenses through to tenants, including common area maintenance

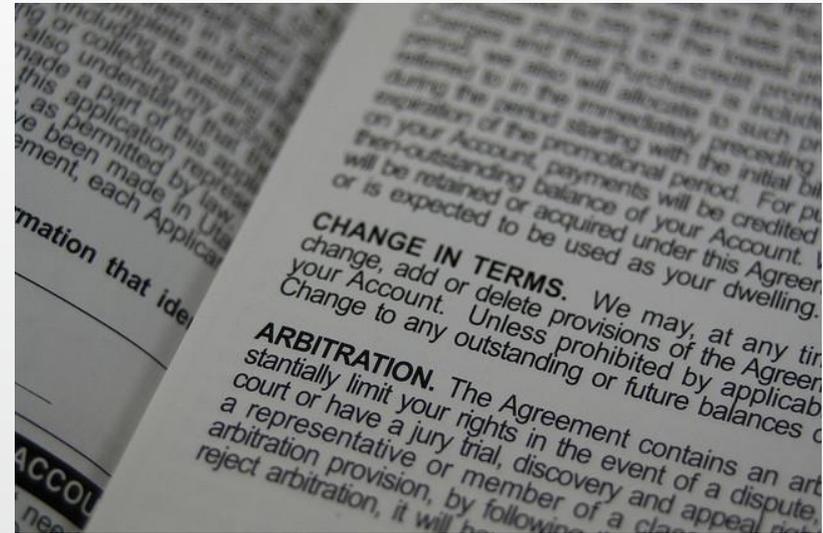


Photo courtesy of Flickr user: Michael Simmons

Operations & Improvements

- All maintenance and repairs made according to sustainability plan

Assignment of Costs and Benefits

- Assign benefits of any carbon or tax credits related to building improvements

Energy and Data Issues

- Benchmark using Portfolio Manager and share data with tenants

- 1.3 Landlord should perform a Retro-commissioning Study of Base Building systems that consume energy or water every ____ years. The Retro-commissioning study should identify improvements of three types:
- No cost improvements: improvements that require a change in practice or redeployment of existing resources such that neither Landlord nor Tenant incur additional out-of-pocket expenditure;
 - System recalibration: system adjustments that may require modest out-of-pocket expenditure by Landlord or Tenant rather than substantial new installations;
 - System upgrades: new installations that may have significant associated expenses.
- 1.5 All installations of resource-consuming equipment or systems in the Base Building and in Tenant space should meet ____ standard whether they are installed by Tenant or Landlord. This provision should apply to fit-out of new space as well as replacements in currently leased space.
- 3.6 Tenant should annually report to Landlord any electric, gas, steam or water usage in Tenant space that is directly metered by the distributor of the commodity, i.e. that does not flow through Landlord's meter.

Why “Green” the Lease?

- Standard commercial leases contain no language regarding sustainability issues.
- Traditional leases often create a split incentive where one party pays for efficiency but a different party reaps some or all of the benefits.
- 3rd party certification systems (LEED, Energy Star) contain requirements such as energy data reporting that should be addressed in the lease.
- State and local regulations increasingly require sustainability/efficiency measures and energy consumption reporting.

Obstacles To Green Leasing In The Marketplace

- Energy efficiency concepts and benefits not well understood by all four stakeholder groups (Landlords, Tenants, Brokers, Lawyers).
- Even among landlords/tenants with sustainability goals, knowledge is not filtering down to those responsible for leasing efforts.
- When green clauses are inserted into lease, lawyers often negotiate out key points and slow down the process.



Photo courtesy of Flickr user: Michael W. May



Energy Independence and Security Act of 2007

- **Passed:** Dec. 2007 Effective: Dec. 2010
- **Affected Property Type:** Federally leased commercial space greater than 10,000 SF.
- **Key Requirement:** Federal agencies must lease space only in buildings that have achieved the Energy Star label, signifying a rating of 75 or greater on the Energy Star benchmarking scale, or where the building owner implements cost-effective energy efficiency upgrades to the space.

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h6enr.txt.pdf

Executive Order 13423

Strengthening Federal Environmental, Energy, and Transportation Management



Washington State Energy Performance Leasing Requirement

- **Passed:** April 2009 Effective: January 1, 2010
- **Affected Property Type:** State-leased commercial space greater than 10,000 SF where the state pays for energy expenses.
- **Key Requirement:** Washington state agencies must lease space only in buildings with an energy performance rating of 75 or greater on the Energy Star benchmarking scale, or where the building owner conducts an energy audit and implements cost-effective energy efficiency upgrades within the first two years of the lease.



New York City: PlaNYC - A Model Energy Aligned Lease Provision

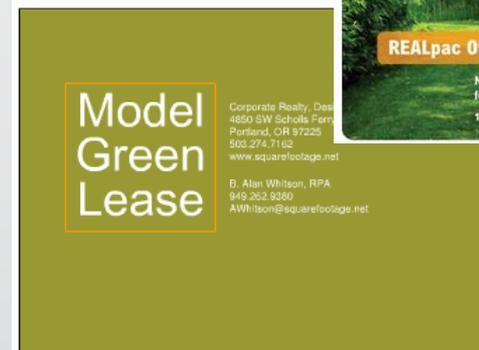
- **Adopted:** Began as a pilot program in 2009.
- **Author:** New York City Mayor's Office of Long-Term Planning and Sustainability, Natural Resources Defense Council and industry stakeholders.
- **Lease Language:** A capital expense pass-through clause allows landlords to recoup 80% of projected energy savings from a retrofit project each year from tenants. The remaining 20% of cost savings accrue to tenants immediately and also act as a buffer in case the retrofit underperforms. Accordingly, the landlord's cost recovery period is extended by 25%.
- **Status:** Incorporated into a 200,000-square-foot lease at 7 World Trade Center in New York City in April, 2011. The lease provision is supported by the Real Estate Board of New York.

Additional Resources

Links to most publicly available green lease forms
www.imt.org/green-leasing

Most widely used forms include:

- BOMA model lease
- RealPAC office lease
- Model Green Lease (Alan Whitson)



Thank you

Please feel free to contact me with any questions

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Institute for Market Transformation

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www.imt.org/green-leasing

The logo for planNYC, featuring the word "plan" in white lowercase letters on a dark blue background, followed by "NYC" in white uppercase letters on a lighter blue background. To the left of the text are three vertical bars in orange, green, and blue.

planNYC

UPDATE APRIL 2011

NYC Benchmarking

**Department of Energy
Technical Assistance Program**

The logo for "A Greener, Greater New York" consists of three stacked rectangular boxes. The top box is green with the text "A GREENER," in white. The middle box is orange with the text "GREATER" in white. The bottom box is light blue with the text "NEW YORK" in white.

**A GREENER,
GREATER
NEW YORK**

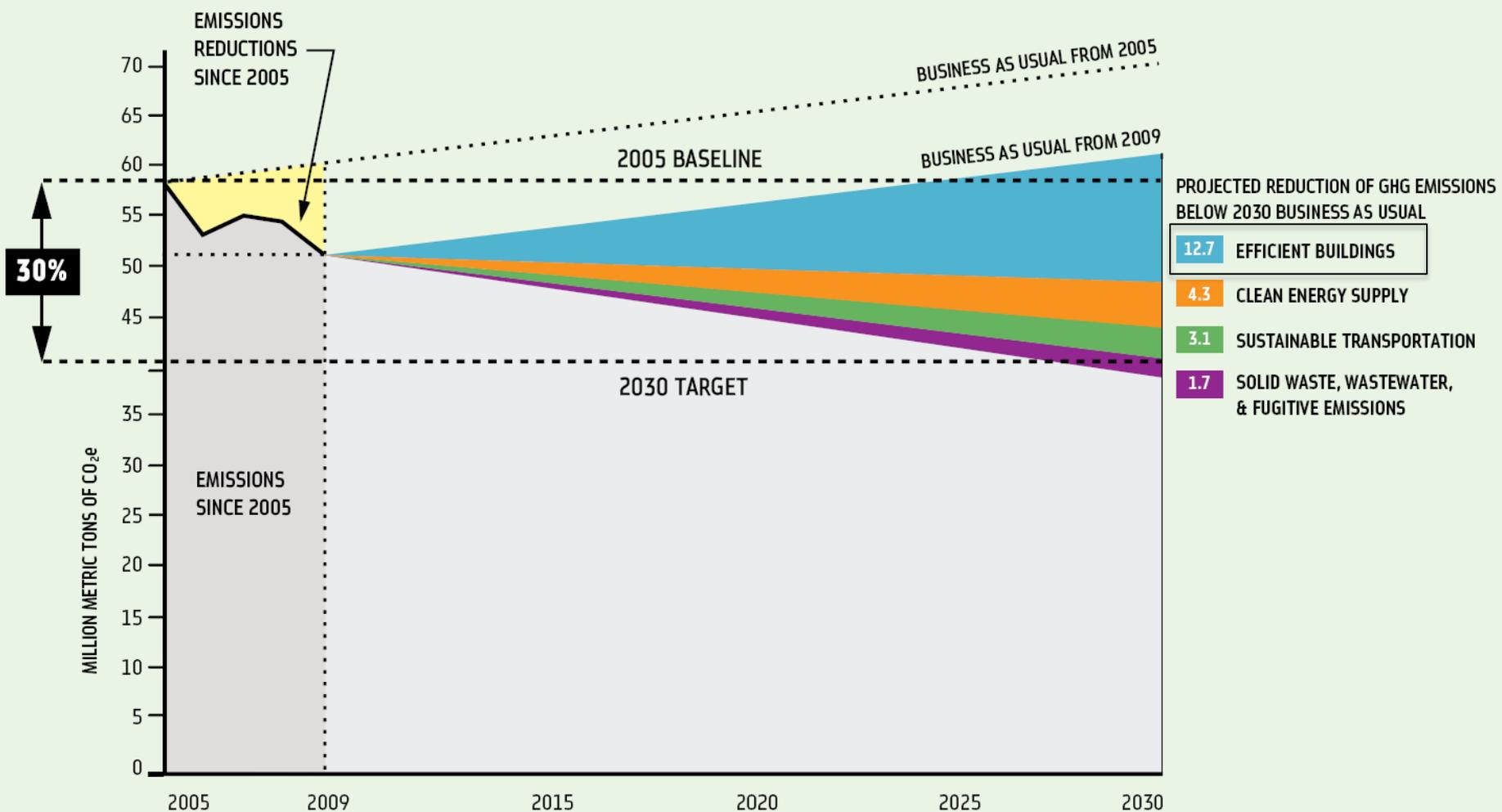


The City of New York
Mayor Michael R. Bloomberg

**November 21, 2011
Hilary Beber, LEED AP
Policy Advisor, NYC Mayor's Office**

30% Reduction in Greenhouse Gases by 2030

Projected Impacts of Our Greenhouse Gas Reduction Strategies



Source: NYC Mayor's Office and M.J. Beck Consulting, LLC

THE NEW YORK CITY

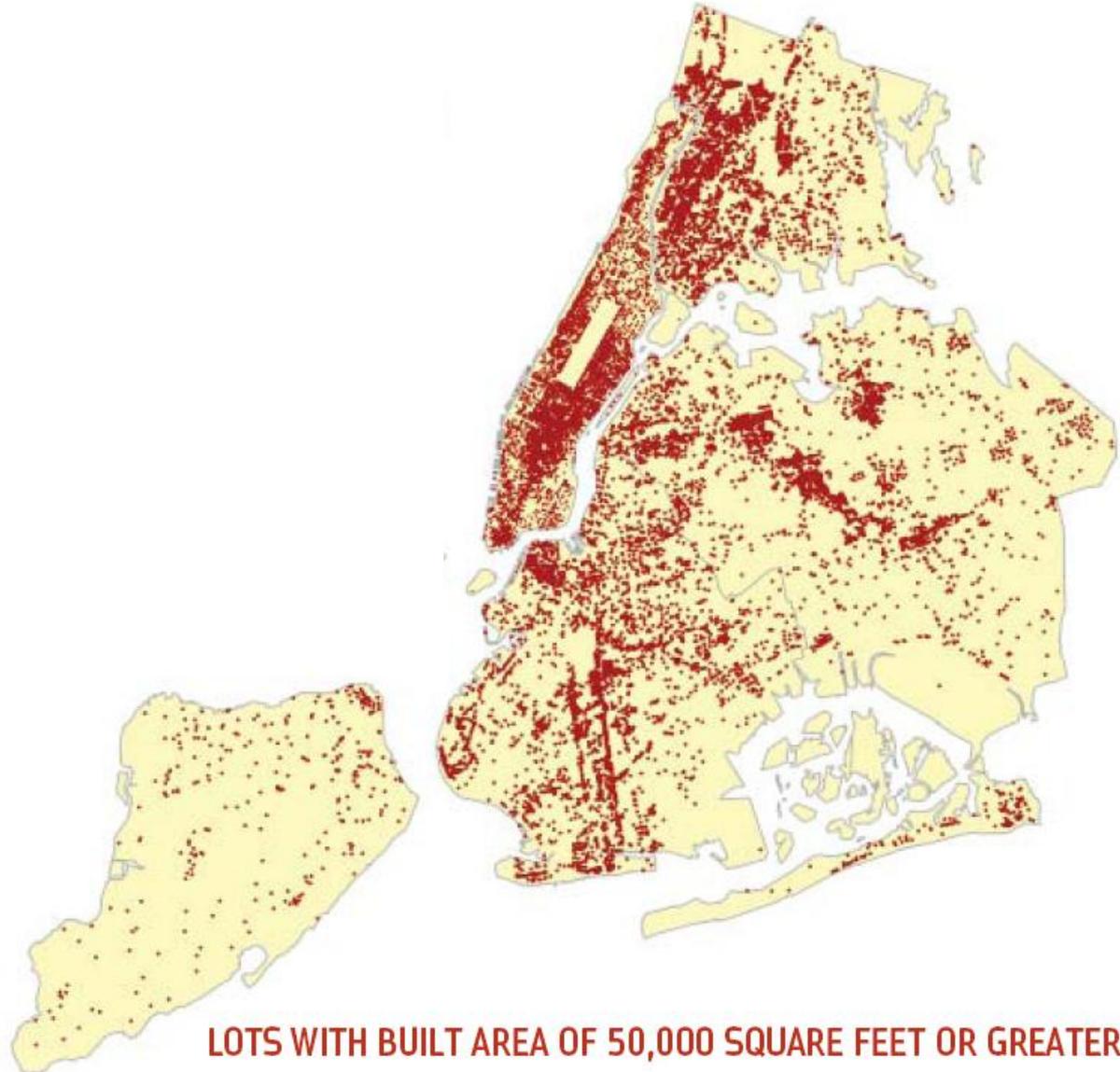
GREENER, GREATER BUILDINGS PLAN

1 New York City
Energy Code

2 Lighting Upgrades and
Sub-Metering

3 Benchmarking

4 Audits and
Retro-Commissioning



Why Benchmark?

- Transparency
- Conservation
- Market Transformation

Requirements

- All buildings over 50,000 square feet
- Annually submit energy and water consumption using EPA's Portfolio Manager

Public Disclosure

- September 1, 2011 – City government buildings
- September 1, 2012 – Non-residential buildings
- September 1, 2013 – Residential buildings



Contact Information

Hilary Beber

Policy Advisor,

NYC Mayor's Office of Long-Term

Planning and Sustainability

hbeber@cityhall.nyc.gov

- The SEE Action is developing a "model policy" and guidance based on what others have done. IMT, DOE, and EPA are all involved in this working group.
- DOE Building Technologies Program (BTP) is developing a tool that can be used to manage data that results from benchmarking & disclosure ordinances, collected in Portfolio Manager.

http://www1.eere.energy.gov/seeaction/existing_commercial.html.

Thanks you for participating!

We appreciate your feedback. Please take a moment to respond to the question below by typing your answer in the Q&A section of the GoToMeeting control panel on the right.

What information from this or any previous benchmarking webinar would you like more detail?