

Madison Benchmarking Ordinance

December 18, 2013

What is Benchmarking?

- ◆ Measurement of a building's annual energy performance

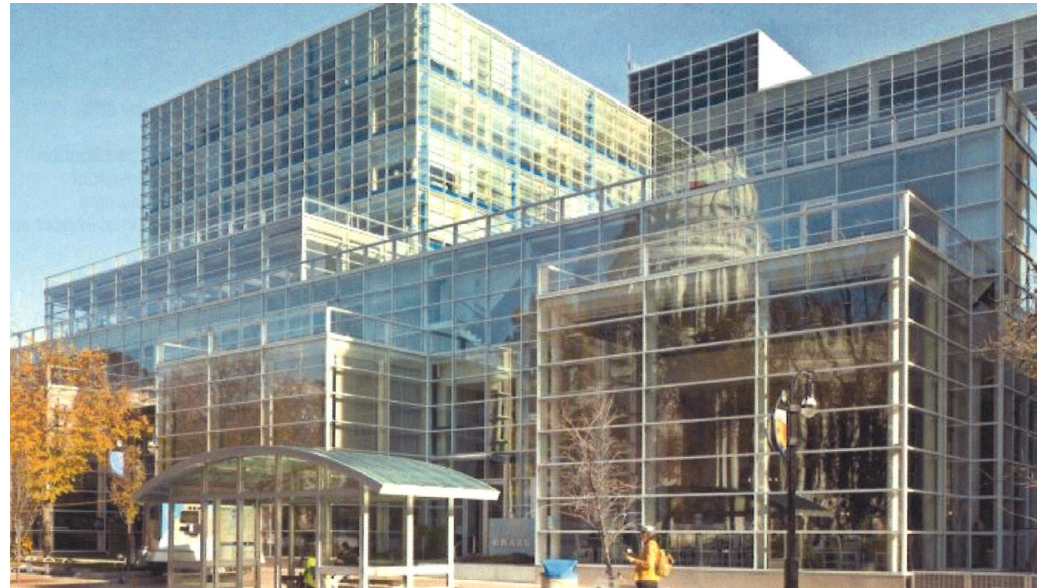
total energy consumed in one year (GJ) /
total floor space of the building (sq.ft.)

- ◆ Allows comparison of energy performance:
 - ◆ same building year to year,
 - ◆ to others in your portfolio, and
 - ◆ among buildings of its type nationally



Building Value Through Energy Efficiency

- Studies show that benchmarking promotes action, and that energy efficient buildings are more profitable at resale.



US Bank Plaza: Energy Star Rated
Urban Land Interests, Madison

Value of Benchmarking

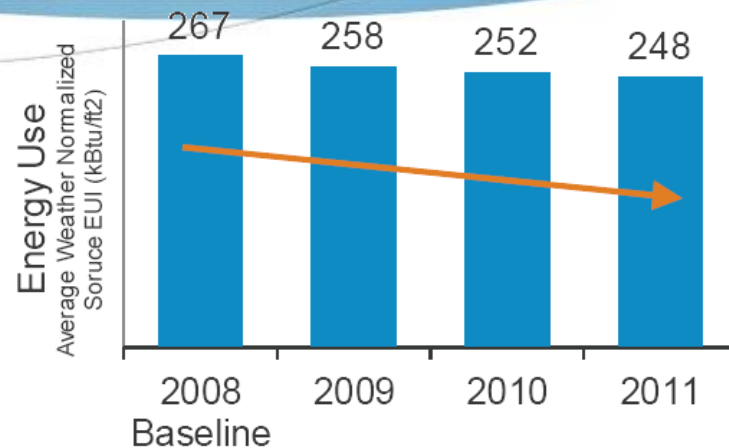
Energy Savings in Portfolio Manager

Consistent benchmarking in buildings results in energy savings and improved performance.

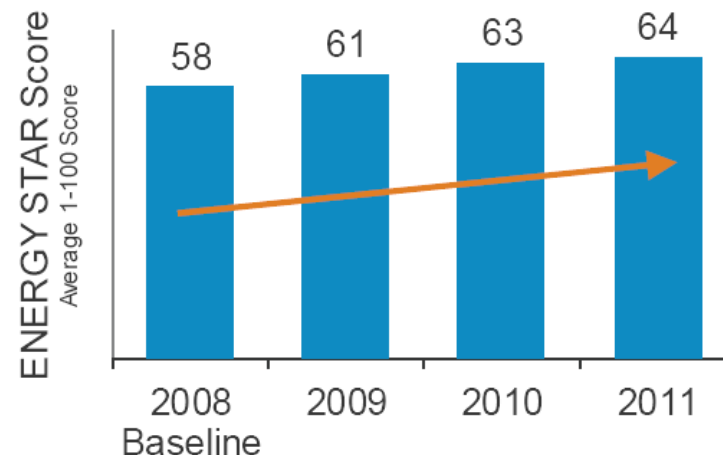
Portfolio Manager results help

- ◆ identify under-performing buildings
- ◆ set investment priorities
- ◆ track improvements

Source:
www.energystar.gov/datatrends

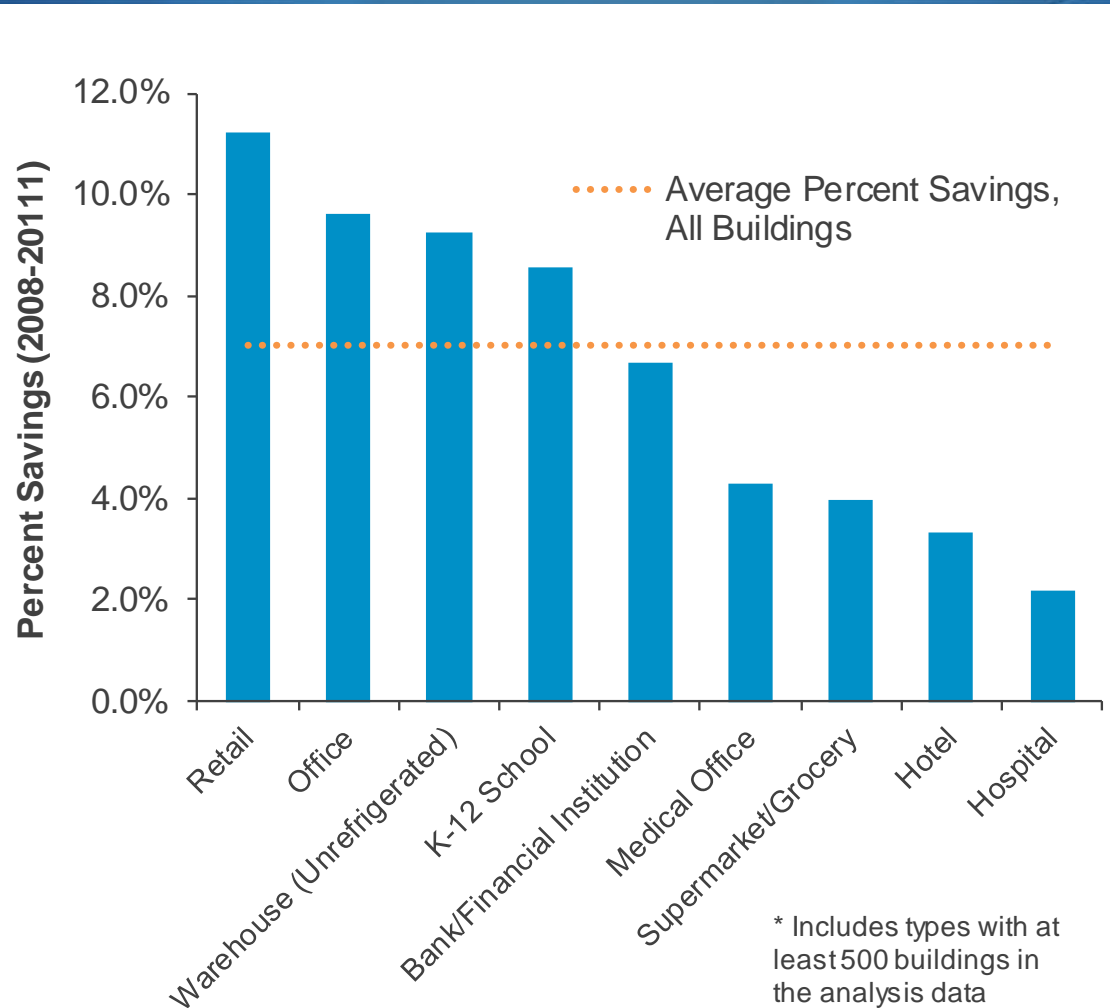


7% Savings



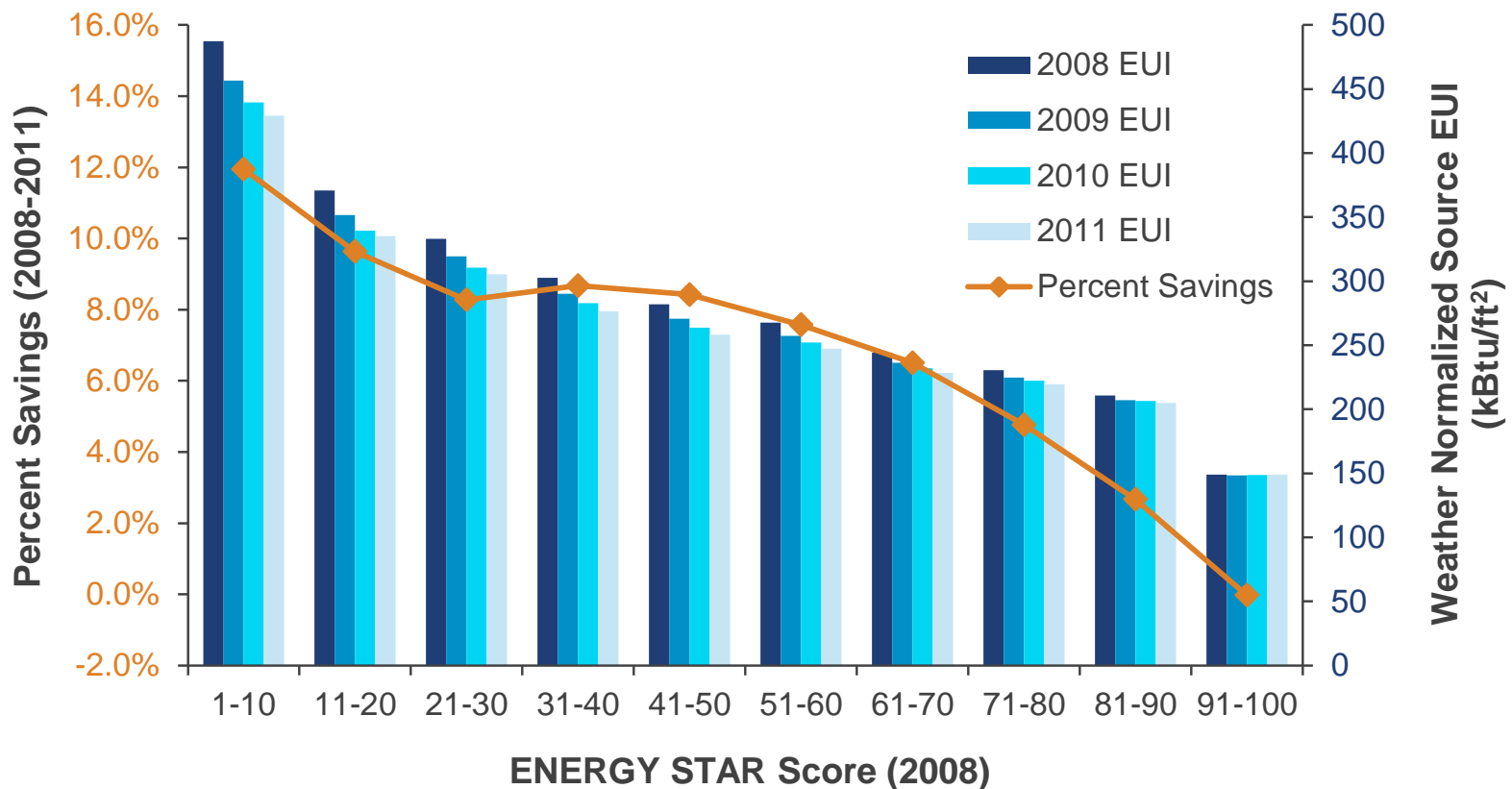
6 point increase

Savings by Building Type



Savings by Energy Score

Buildings starting with scores below 50 have saved more than twice the average



Energy Star Adds Market Value

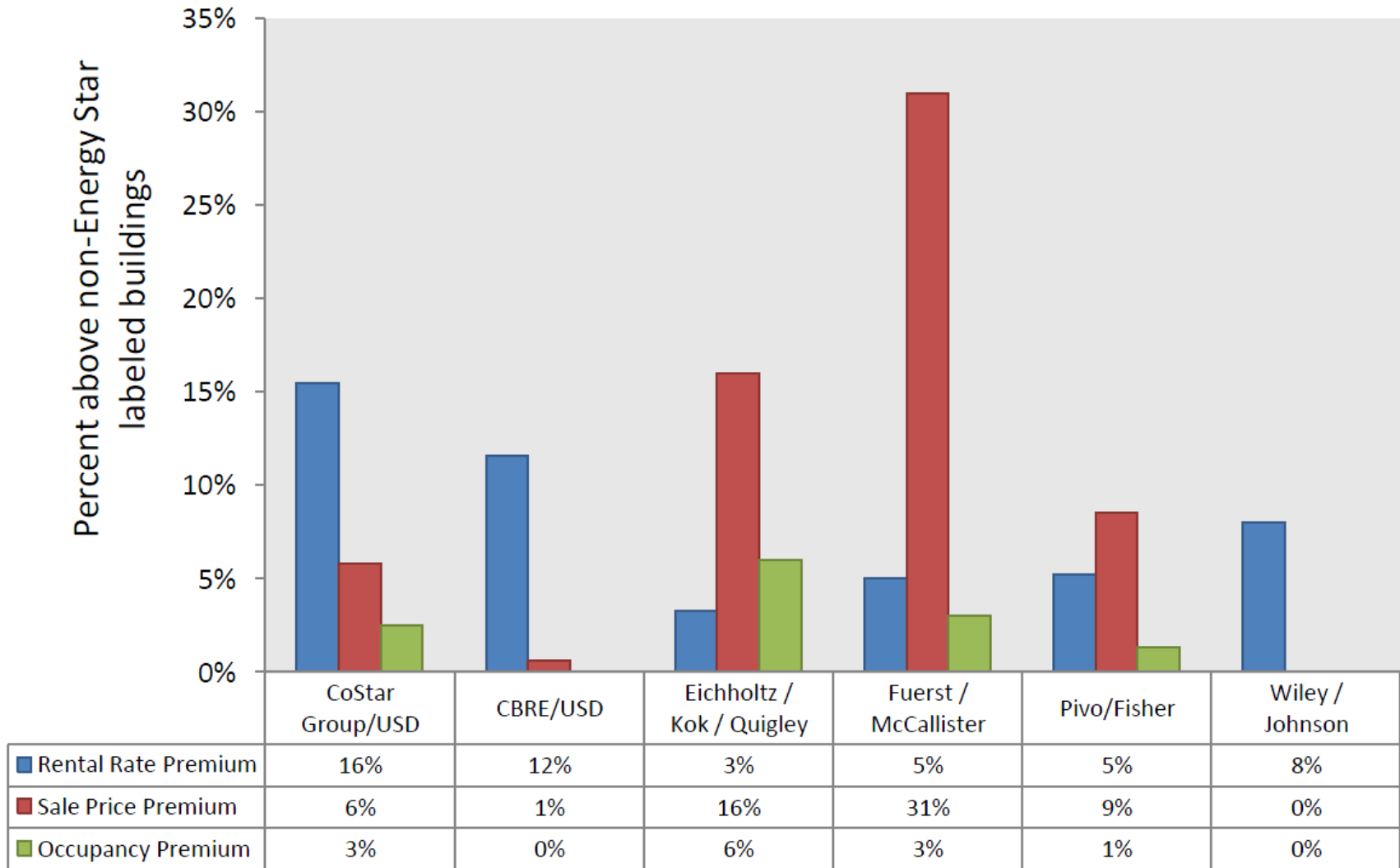
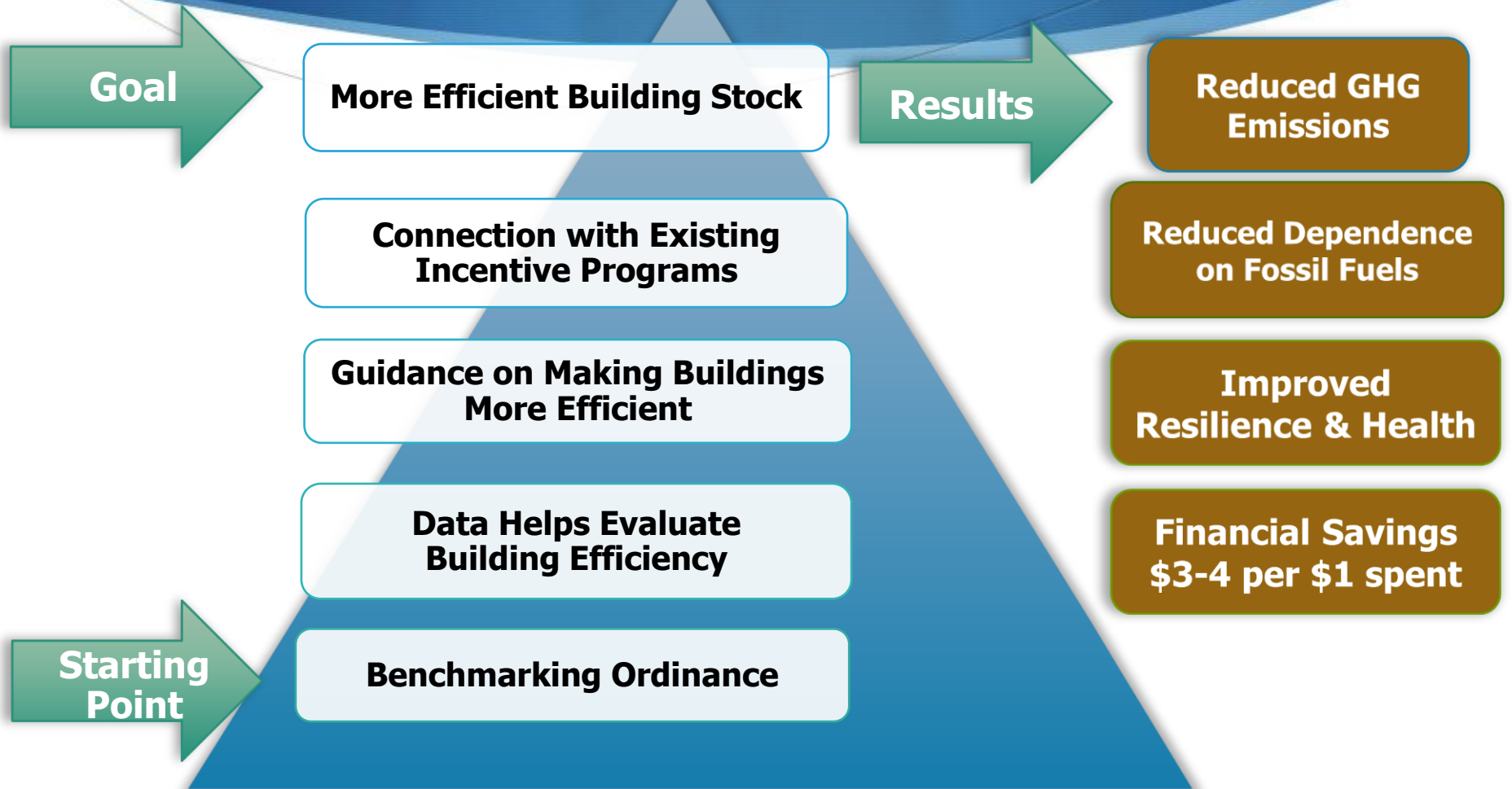


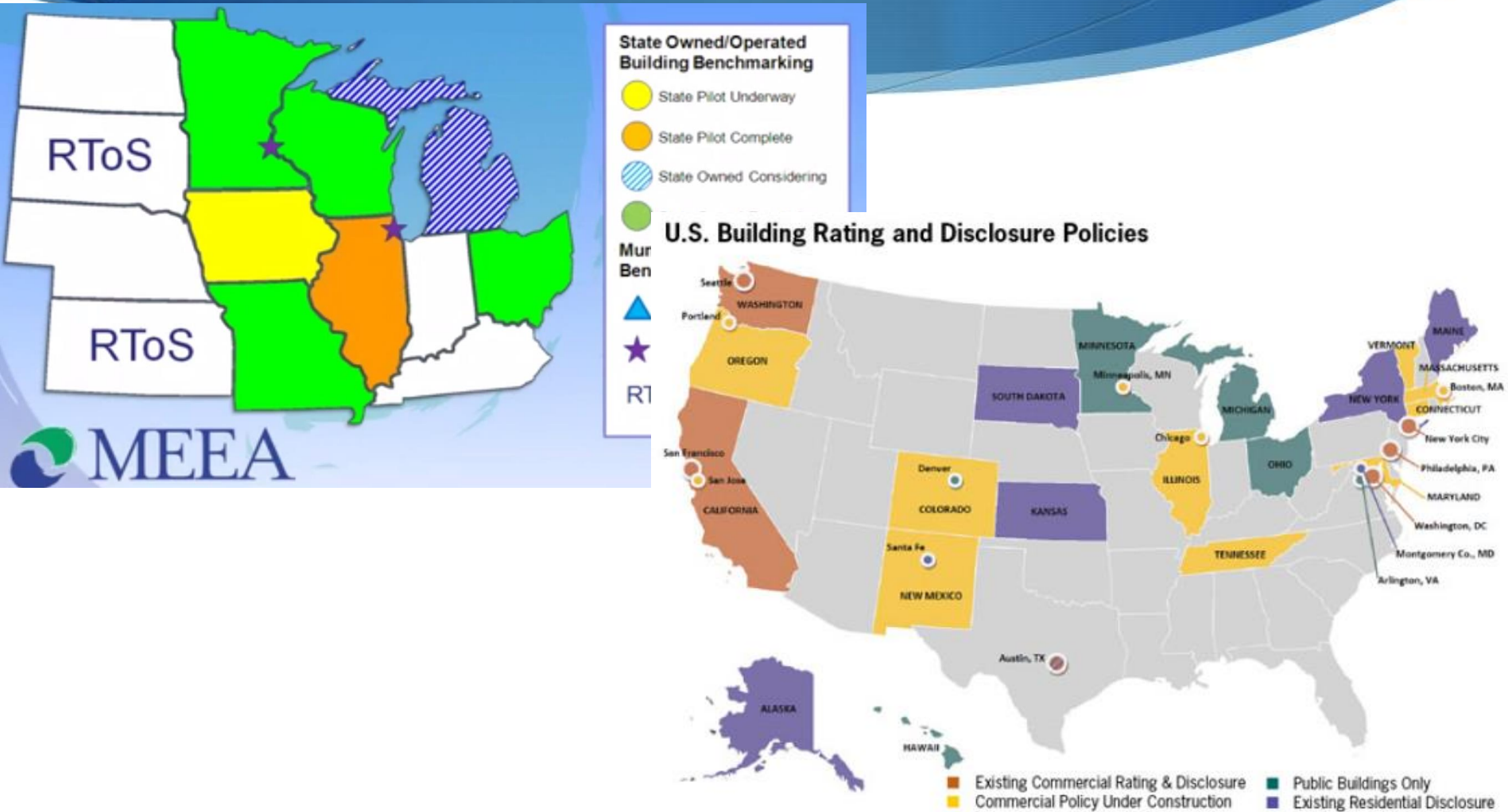
Figure 1 Studies evaluating the added market value of Energy Star labeled buildings.¹

Source: Benchmarking and Disclosure: Lessons from Leading Cities, Boston Green Ribbon Commission's Commercial Real Estate Working Group, June 2012

Benchmarking Program Design



US & Midwest Benchmarking Legislation Status



Madison Benchmarking Ordinance

- **Target Audience**

- Public and Commercial Buildings

- **Goals**

- Reduced city-wide carbon footprint
- Acceleration of energy efficiency
- Market-Driven energy performance
- Energy performance and water use measurement

- **Submission**

- Annual energy use data in Energy Star Portfolio Manager

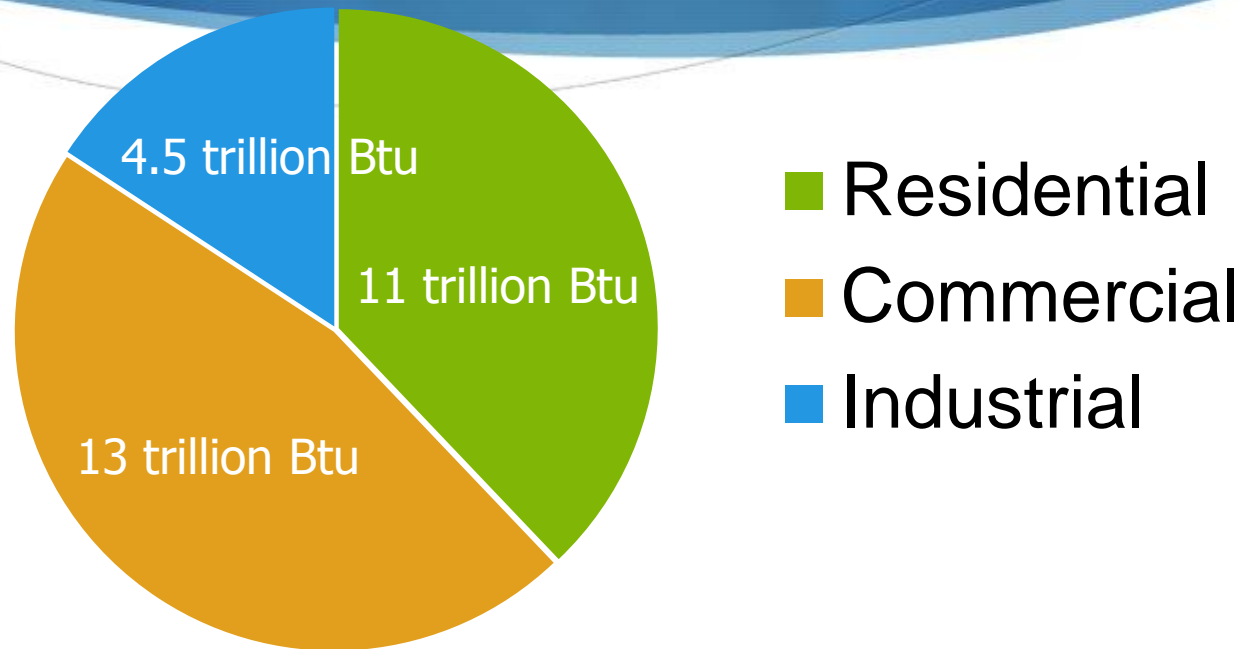
- **Phased Reporting**

- 1 year grace period

- **Assistance with Implementation**

- City, MGE, Alliant, Mpower, Focus on Energy, WI Green Building Alliance, UW-Extension, SEO, US EPA, IMT, NEMA

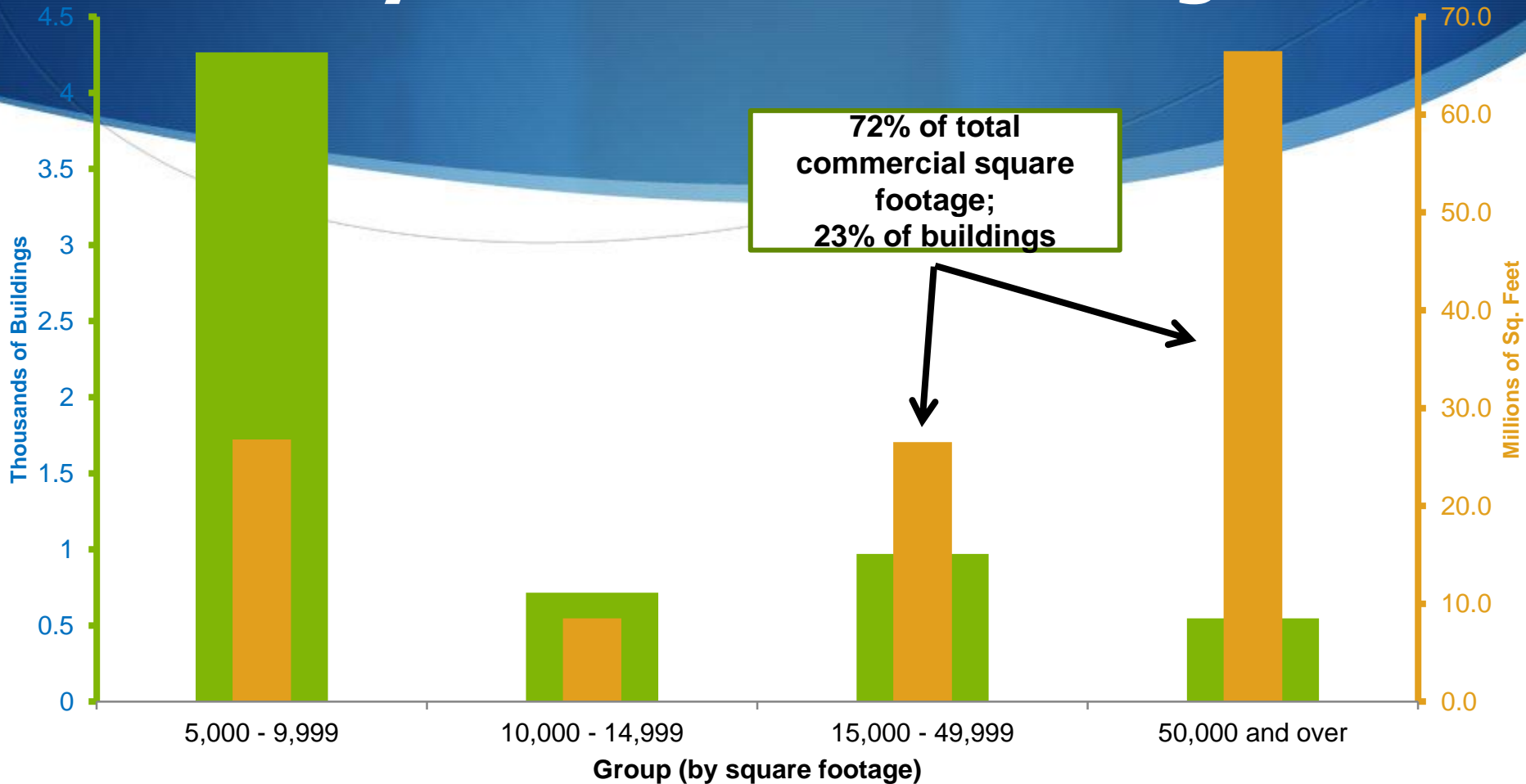
Madison Energy Use (trillion Btu)



Commercial Buildings currently use 46% of energy in Madison

Source: MG&E 2012 Annual Report

City of Madison Buildings



Benchmarking commercial buildings over 15,000 sq ft has potential to save **300 billion Btu's** per year

Overview of Madison's Benchmarking Ordinance

Energy Benchmarking

- Public and Commercial Buildings $\geq 15,000$ SF required to track energy consumption
- Multi-Family Residential Rental Buildings > 35 units
- Energy & water data entered into Energy Star Portfolio Manager (free, web-based)
- Phased implementation based on building size. Benchmark 1 year energy use. Report by:
 - City owned buildings:
starting May 1, 2014
 - Buildings $\geq 50,000$ SF: **2015**
 - Buildings $\geq 15,000$ SF: **2016**
 - Multi-Family Rentals > 35 units: **2017**

Data Verification

- Every 3 years, building energy data must be verified by an energy professional
- Verification improves data quality and levels the playing field
- Approximate cost based on building complexity and data accuracy: \$500 - \$2,000

Reporting and Disclosure

- Buildings report energy use annually, using automated Portfolio Manager tool
- City reports annually to the public on energy efficiency trends
- City makes energy scores public after 2 year grace period; allows time to improve scores.
- Disclosure schedule:
 - City owned buildings:
starting July 30, 2014
 - Buildings $\geq 50,000$ SF: **2016**
 - Buildings $\geq 15,000$ SF: **2017**
 - Multifamily residential buildings > 35 units: **2018**

Experience of Madison Businesses that Benchmark

Urban Land Interests

“Urban Land Interests benchmarked the US Bank Plaza before and after strategic renovations. We cut energy usage by 35-40% for an estimated annual saving of \$250,000, dropped water usage 85% from 32 million to 3.9 million gallons per year, and moved from an Energy Star rating of 41 to Energy Star certified status to a score of 91 out of 100. We earned LEED Gold certification for Existing Buildings Operations and Maintenance as a result, and currently, have a vacancy under 10%. We believe that benchmarking is the necessary first step to improve building energy performance. As an ongoing tool, it allows us to verify energy use reductions and ensure that our buildings are performing as well as possible. Benchmarking is good business practice.” -- - Matt Darga, Director of Commercial Property Management

American Family Insurance

At American Family Insurance, we benchmark all our buildings across the US with EPA’s Portfolio Manager. The primary benefit we have seen is a consistent platform for comparing our energy consumption within our portfolio as well as with other buildings across the nation. Through a series of energy conservation projects since benchmarking began in 2007, American Family has recognized more than \$1.7 million in savings in our Madison buildings alone. The awareness that the ordinance would create amongst businesses of their own energy consumption compared to others could aid in motivating them toward similar benefits to those we have recognized.” - Sean W. Hyland, Facilities Program Administrator

Engage Stakeholders of Madison Benchmarking Ordinance

