

NAREIT 2017 Leader In The Light

Sustainable Real Estate Practices

Working Forum



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real foundations

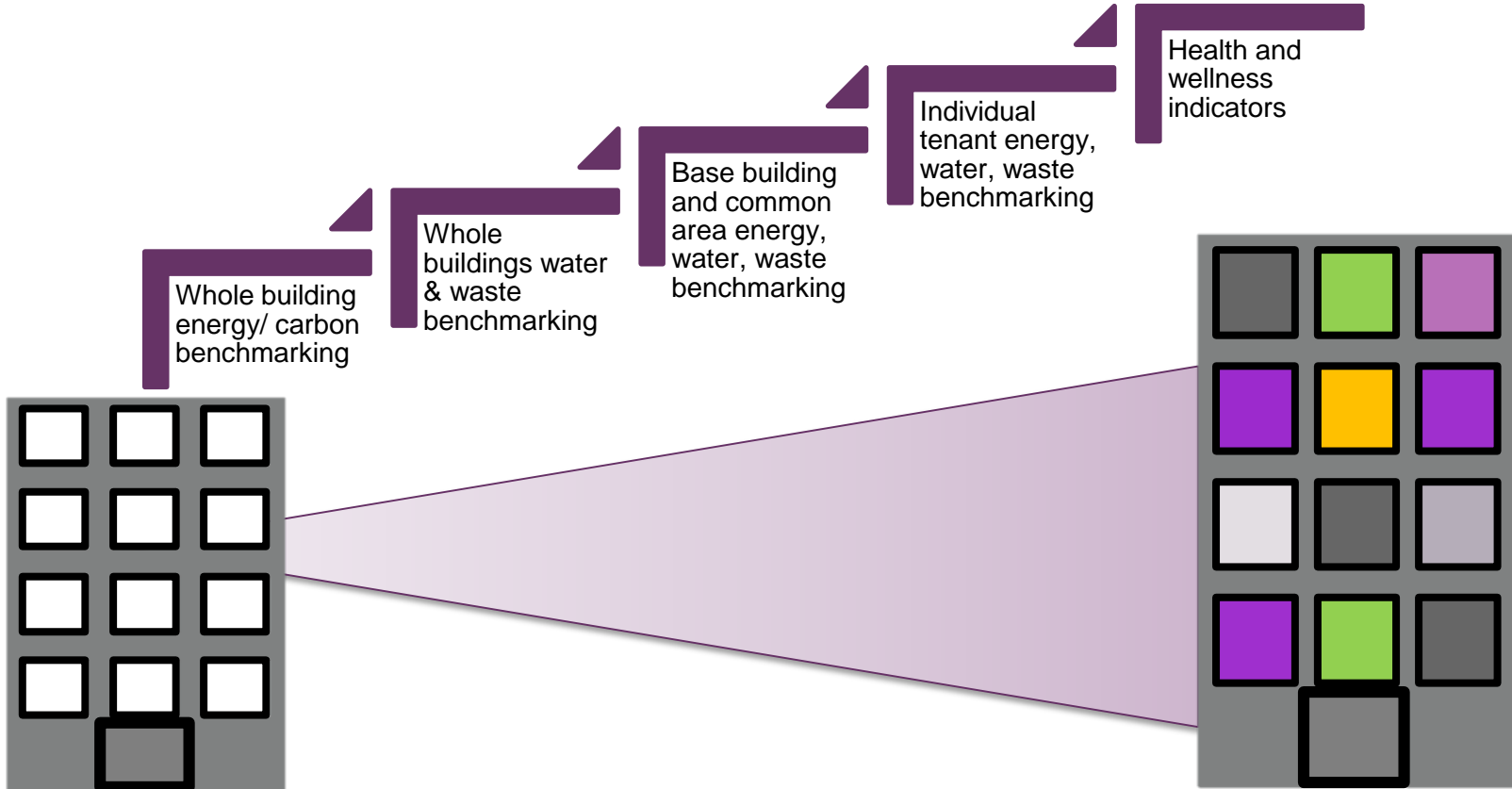
ULI Center for Sustainability: Tenant Energy Optimization Program



**Urban Land
Institute**



**ULI Greenprint Center
for Building Performance**



2009

2017 and beyond...

“By the industry for the industry”

- ◆ Founded in 2009, Greenprint is a worldwide alliance of **leading real estate owners and financial institutions** committed to improving the **environmental performance** of buildings
- ◆ The **mission** is to lead the global real estate community toward **value-enhancing carbon reduction strategies**
- ◆ Greenprint is a member driven nonprofit with the **goal** of reducing greenhouse gas emissions **by 50% by 2030**



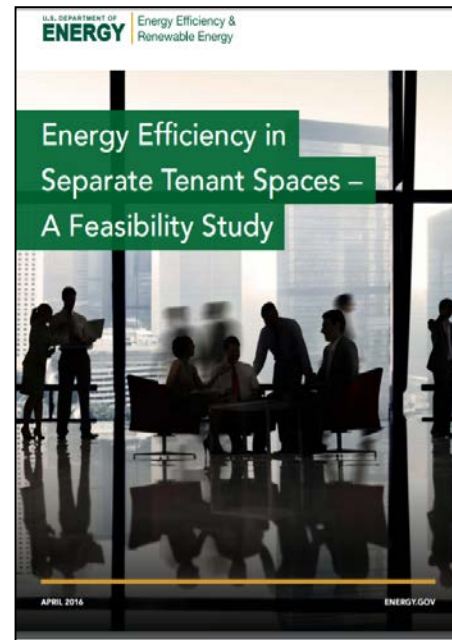
**ULI Greenprint Center
for Building Performance**

ULI Greenprint Program of Work

- ◆ Focus on **data analysis and benchmarking** to help the industry measure and improve environmental performance
- ◆ **Knowledge sharing** through webinars, innovation roundtable, case studies, peer to peer learning and best practice sharing sessions
- ◆ **Engage with cities** to bring our knowledge and the private sector voice into the public sector conversation
- ◆ Establish **partnerships** and alliances to engage with likeminded organizations to **expand reach and set standards** (EPA, UNEP, NRDC, IMT, GRESB)
- ◆ Support of the **Tenant Energy Optimization Program** that works with owners, tenants, and service providers to implement energy efficiency measures and drive demand for high-performance spaces

Focus on Tenant Energy Use

- ◆ Over 50% of energy used in commercial office buildings is consumed by tenants
- ◆ Increasing market pressures for both tenants and landlords:
 - ◆ Rising energy prices
 - ◆ Energy disclosure requirements
- ◆ Challenges to improved energy efficiency in tenant space:
 - ◆ “Split-incentive” problem
 - ◆ Lack of data
- ◆ Energy Efficiency Improvement Act of 2015 mandates establishment of voluntary tenant space recognition program (“Tenant Star”)



Tenant Focused Programs



ULI Tenant Energy
Optimization Program



“Tenant Star”



Green Lease Leaders



Landlord-Tenant Energy
Partnership



LEED ID+C &
Well Standard

ULI's Tenant Energy Optimization Program

- ◆ Free and open program
- ◆ A returns-driven, 10-step process to embed energy efficiency decisions into tenant space design and construction
- ◆ Piloted in 10 tenant fit-outs, documented in case studies
 - ◆ Energy savings of 30 – 50%
 - ◆ Payback period of 3 – 5 years
 - ◆ Average IRR of 25%
- ◆ Additional tools to support practitioners

TenantEnergy.ULI.org



ULI's Tenant Energy Optimization Program

PHASE I: PRE-LEASE



Step 1: Select a team

- Use a broker with experience in sustainability.
- Add other team members (architect, engineer, etc.) in subsequent steps.



Step 2: Select an office space

- Choose an efficient base building.
- Negotiate lease terms that allow energy efficiency improvements.

PHASE II: DESIGN AND CONSTRUCTION



Step 3: Set energy performance goals

- Consider overall corporate sustainability commitments and investments.



Step 6: Make final decisions

- Determine the optimal package that meets financial (NPV and IRR) and energy performance goals.



Step 4: Model energy reduction options

- Develop a Menu of Measures.
- Project performance of different combinations and iterations of measures.



Step 7: Develop a post-occupancy plan

- Address needs for performance monitoring and occupant training.



Step 5: Calculate projected financial returns

- Review incremental costs and available incentives.
- Use Value Analysis Tool.



Step 8: Build out the space

- Execute the planned energy efficiency projects.

PHASE III: POST-OCCUPANCY



Step 9: Execute the post-occupancy plan

- Measure and verify performance and perform ongoing maintenance.

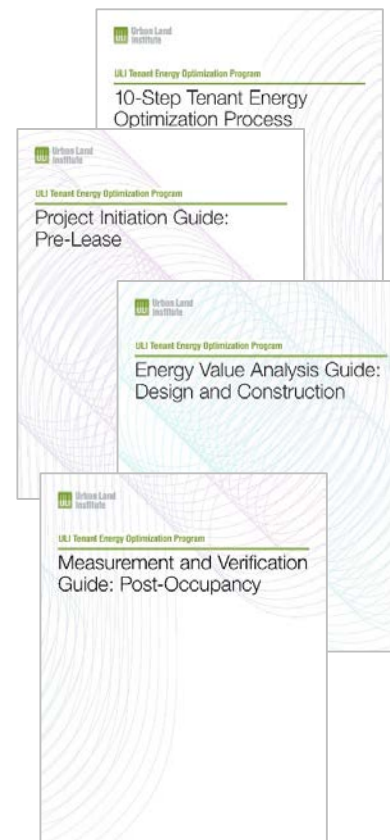


Step 10: Communicate results

- Perform ongoing reporting.

ULI's Tenant Energy Optimization Program

- ◆ 10-Step Process Overview
- ◆ Three technical resource guides:
 - ◆ Pre-Lease
 - ◆ Design and Construction
 - ◆ Post-Occupancy
- ◆ Value Analysis Tool
 - ◆ Excel tool
 - ◆ Compare various EPM packages



TenantEnergy.ULI.org

Questions?

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Environmental Policy Update

Cliff Majersik

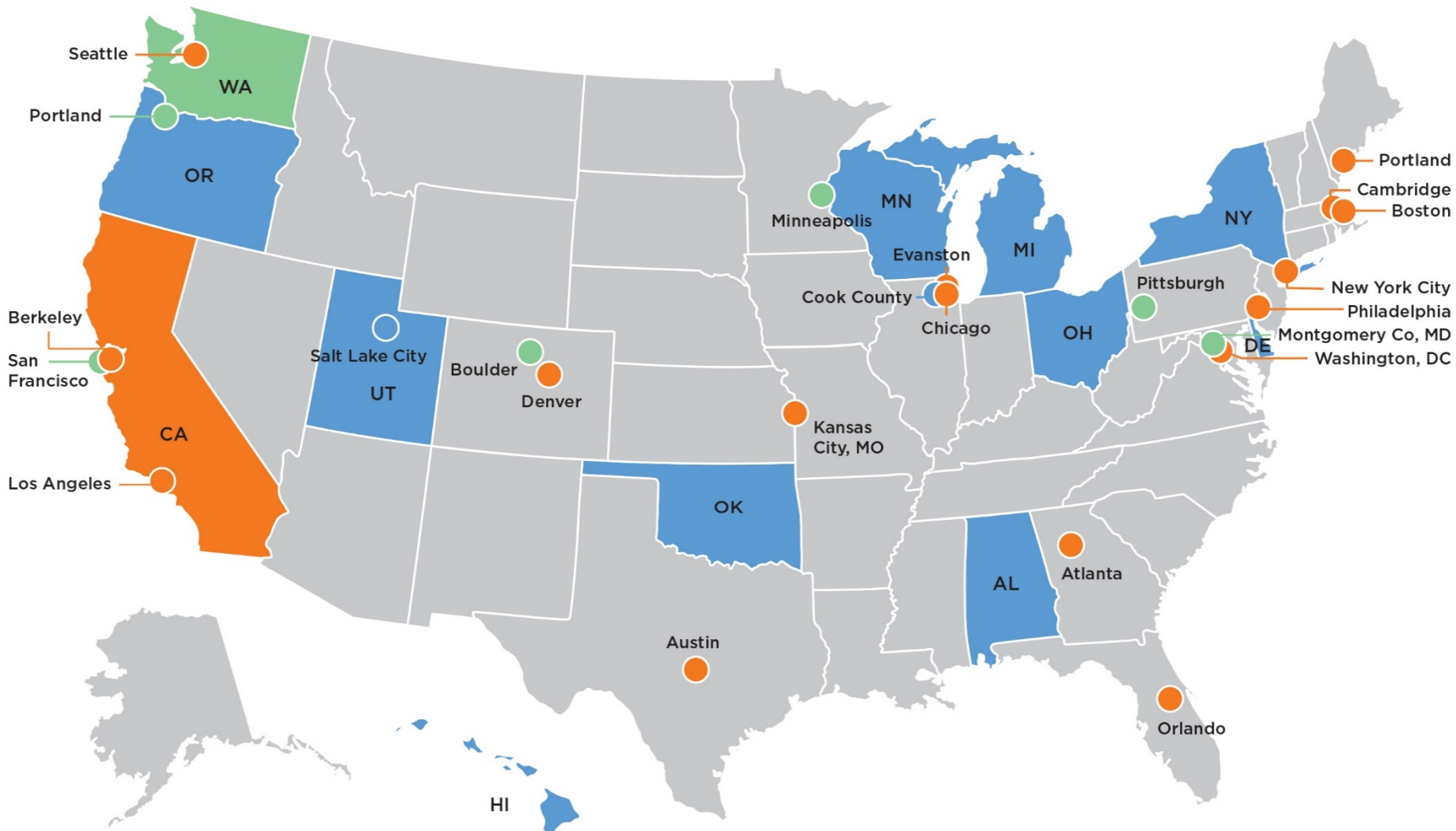
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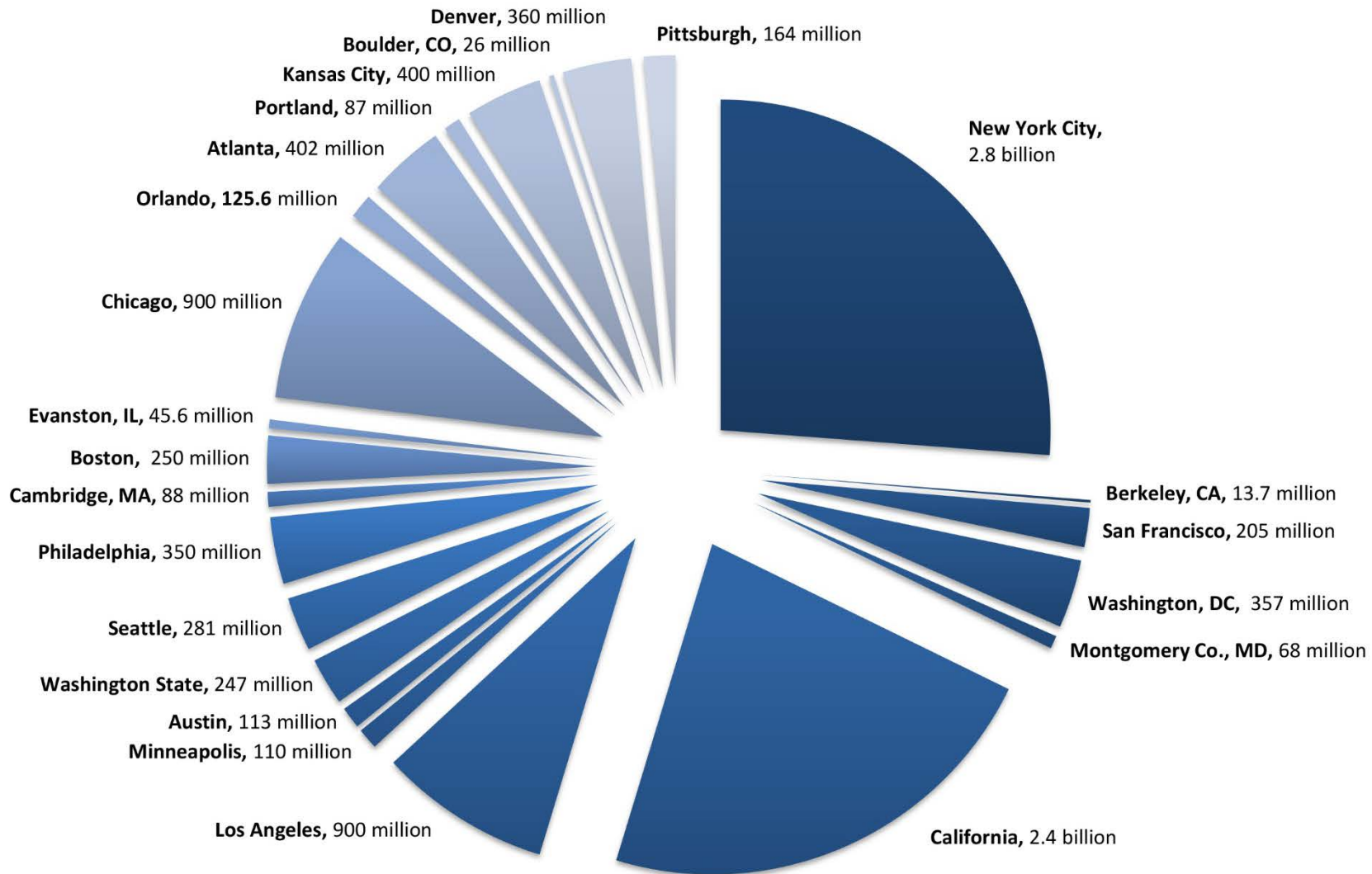
U.S. Building Benchmarking and Transparency Policies



- Public, commercial, and multifamily building benchmarking policy adopted
- Public and commercial building benchmarking policy adopted
- Public buildings benchmarked



U.S. Benchmarking: Flagship Policies, 10.7 Billion Sq. Ft. of Commercial Space



Benchmarking Resources

All IMT resources

www.imt.org

Benchmarking laws, details, maps

www.buildingrating.org

How to get data from each utility

www.energystar.gov/utilitydata



www.greenleaseleaders.com

www.greenleaselibrary.com



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THE JBG COMPANIES®

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PGIM

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Centers.



Cadillac
Fairview



SHORENSTEIN



Ivanhoé
Cambridge



LANDLORD-TENANT ENERGY PARTNERSHIP

A Partnership of:



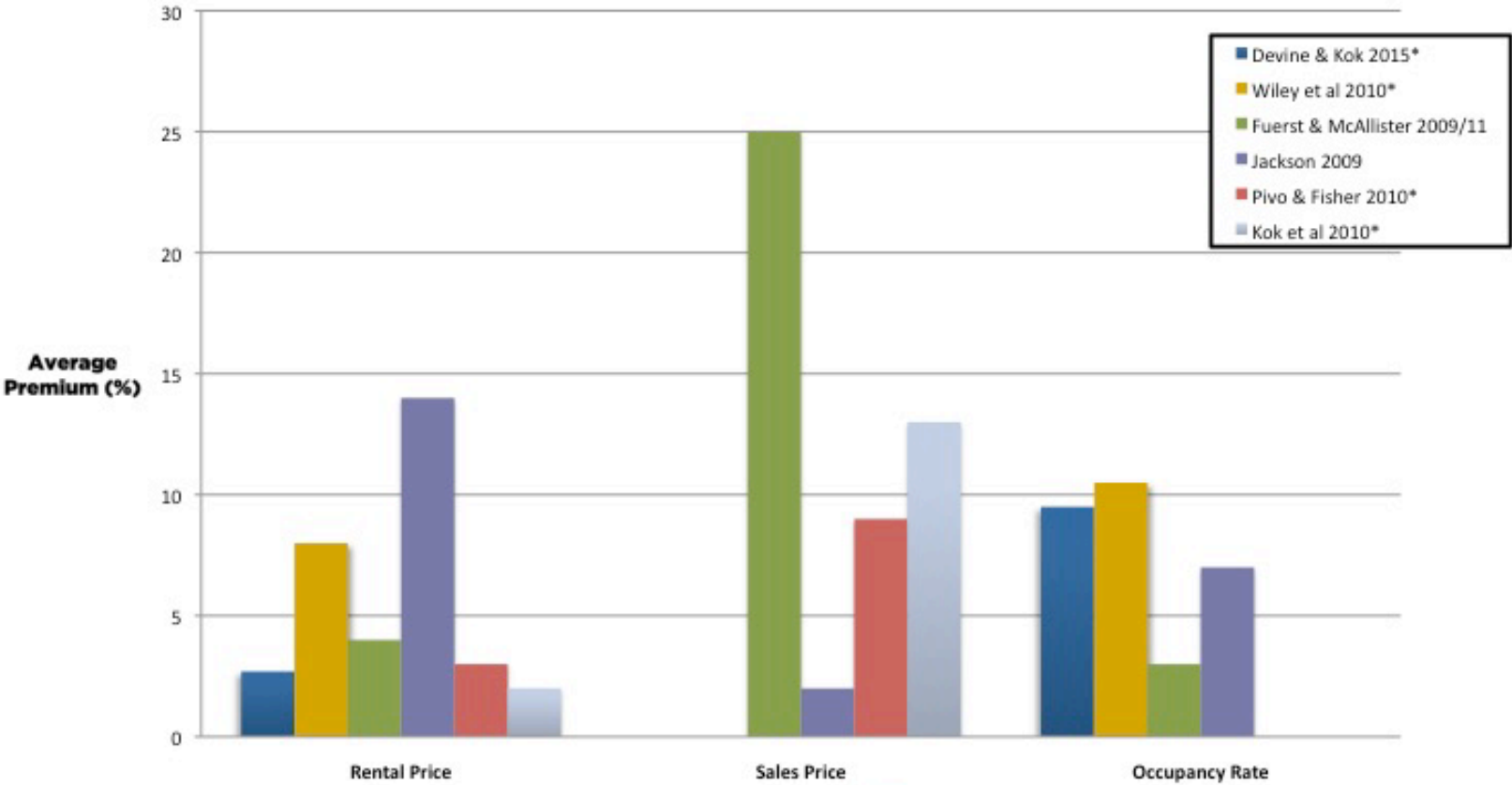
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TRANSFORMATION

RILA
RETAIL INDUSTRY LEADERS ASSOCIATION
Educate. Collaborate. Advocate.



www.landlordtenantenergypartnership.com

Added Value of ENERGY STAR-Labeled Commercial Buildings in the U.S. Market



©Institute for Market Transformation, 2016
 * These studies only tracked two of the listed indicators.
 All studies controlled for multiple factors, including building size and location.
 For more information, contact Leonard Kolstad at lenny@imt.org

Educating Additional Stakeholders



Recognition Of Energy **Costs** and Energy **Performance** in Real Property Valuation

Considerations and
Resources for Appraisers

Second Edition

May 2012



GREEN BUILDING AND PROPERTY VALUE

A PRIMER FOR BUILDING OWNERS AND DEVELOPERS



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UPDATES

WASTE TRACKING

RECYCLABLE SUPPLY GREATER THAN THE DEMAND?

ADDED TO PORTFOLIO MANAGER

REDUCE OVERALL WASTE?

CREATING A DEMAND FOR DATA

NEED COLLABORATION TO STANDARDIZE METRICS

BUT INDUSTRY NOT REALLY UP TO TASK



CAN BE PARTIALLY IMPLEMENTED?

10-STEP PROCESS

INFO ON WEBSITE

MORE EFFICIENT SPACES

ULI TENANT ENERGY OPTIMIZATION PROGRAM

WORKING WITH OTHER PROGRAMS TO CREATE CONSISTENCY

4-YEAR OLD PROGRAM

ENVIRONMENTAL PERFORMANCE ↔ FINANCIAL PERFORMANCE

15 TENANTS SO FAR

10 CASE STUDIES

WILL THE SAME RESOURCES BE AVAILABLE?

SOME WILL BE

BEGIN THE JOURNEY NOW

ADOPTION OF BENCHMARKING/TRANSPARENCY LAWS

ENVIRONMENTAL REGULATIONS

PLEASE SPEAK UP IF YOU'RE USING OUR RESOURCES!!

CALIFORNIA BILL 802

MANY MORE BUILDINGS MUST DISCLOSE W/IN NEXT TWO YEARS

LANDLORD/TENANT ENERGY PARTNERSHIP

WE SEE A WAY FORWARD BY WORKING WITH CITIES

BEGINNING TO SEE EVIDENCE OF A GREEN PREMIUM

CITIES BENCHMARKING WASTE?

ADDRESS LB SR.FT. TOGETHER

