

# 2016 National Symposium on Market Transformation

## Challenges and Opportunities: Energy Efficiency in Commercial Real Estate

March 21, 2016

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# Company Overview

- **Family-Owned, Privately-Held Real Estate & PM Firm**
- **Locally-Focused**
- **Develops, Owns & Manages**
- **Over 5 million SF of commercial office, multi-family residential, and retail centers**
- **Leader in Sustainability**



# Sustainability Leadership

**Lead by example on environmental responsibility**, by developing and managing high performance properties, being a global voice on environmental stewardship, and sharing our sustainable and innovative practices.



# Goal: 20% by 2020

## Energy Performance

### ENERGY PERFORMANCE

Cumulative (vs. Baseline)	13%
Annual (2014)	4%

### WATER PERFORMANCE

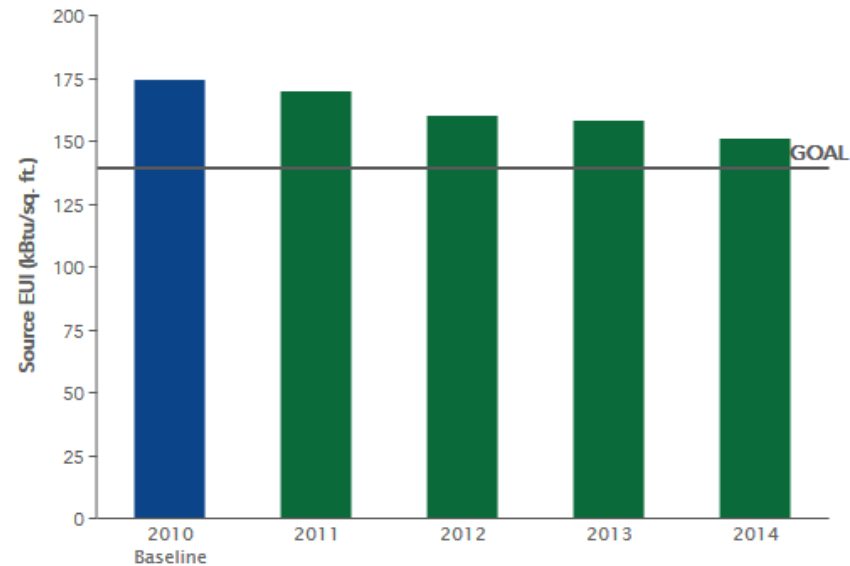
Cumulative (vs. Baseline)	15%
Annual (2014)	1%

### PORTFOLIO ENERGY PERFORMANCE

Better Buildings Challenge Partners strive to decrease portfolio-wide source energy use intensity (EUI) and to increase the percent improvement compared to a set baseline. Tower has committed 10 buildings that they both own and manage, which make up 3 million square feet of multi-tenant commercial office and multi-family high-rise residential properties. Compared to a 2010 baseline, Tower has improved energy performance by 13% due in large part to implementing a Real-Time Energy Management Program focused on low-cost ECMs and sustainable operations, LED lighting retrofits, BMS control upgrades, and equipment upgrades. There are other properties that The Tower Companies owns but that are not managed directly and therefore, aren't being included in this program.

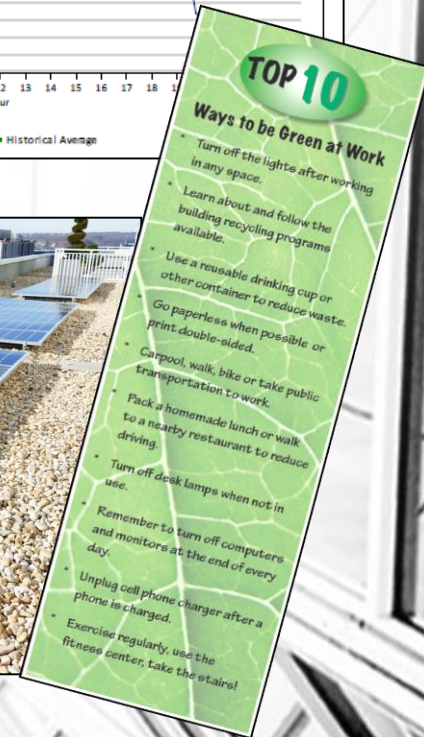
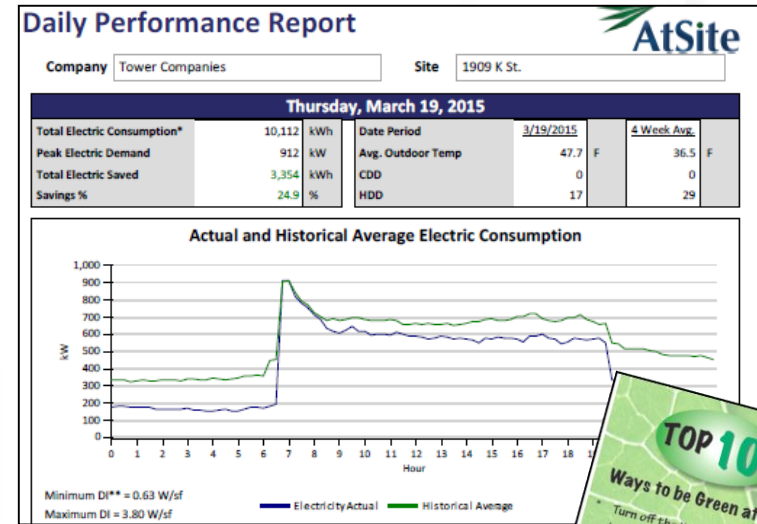


EUI and % Improvement vs. Baseline



# Energy Conservation Measure Best Practices

- ✓ Benchmarking
- ✓ Real-Time Energy Management
- ✓ Night Audits
- ✓ Set-point modifications
- ✓ Green Lease Guidelines
- ✓ Common Area LED Lighting
- ✓ BMS & Equipment Upgrades
- ✓ Renewable Energy
- ✓ Green Teams
- ✓ Plug Load Management



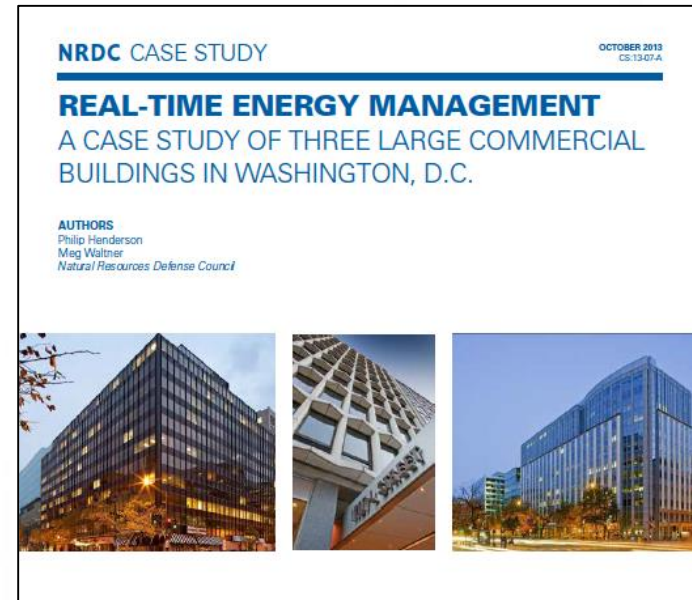
# Energy Efficiency Incentives

- **Federal Government – 179 D Federal Tax Deductions**
- **State of Maryland EMPOWER Grant Program for 20% Energy Reduction**
- **Montgomery County Property Tax Credits for LEED Certification**
- **City of Rockville, Maryland Tax Credits for LEED Certification**
- **PEPCO Rebates in Maryland**
  - **Lighting, Motors, Pumps, Appliances, Retro-Commissioning, Training**
- **DCSEU (DC Sustainable Energy Utility) Program in DC**
  - **Lighting, Equipment Upgrades**
- **Demand and Peak Response Programs**

# NRDC Case Study

Are claims of 10% to 20% energy savings realistic in commercial buildings?

**YES!**



	Square Feet	2012 Occupancy	2011 kWh	2012 kWh	kWh Savings	\$ Savings	Percent of kWh Savings
1707 L Street	109,926	302	1,965,135	1,516,274	448,861	\$58,352	23%
1828 L Street	332,928	928	5,590,937	5,227,183	363,754	\$47,288	7%
1909 K Street	239,128	462	5,197,305	4,327,589	869,716	\$113,063	17%
Total for three buildings combined			12,753,377	11,071,046	1,682,331	\$218,703	13.2% Average

<http://towercompanies.com/news/> → Case Studies → Real-Time Energy Management

*Thank you!*

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