



Citywide Action 2015 Energy Update

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March 2015

Overview

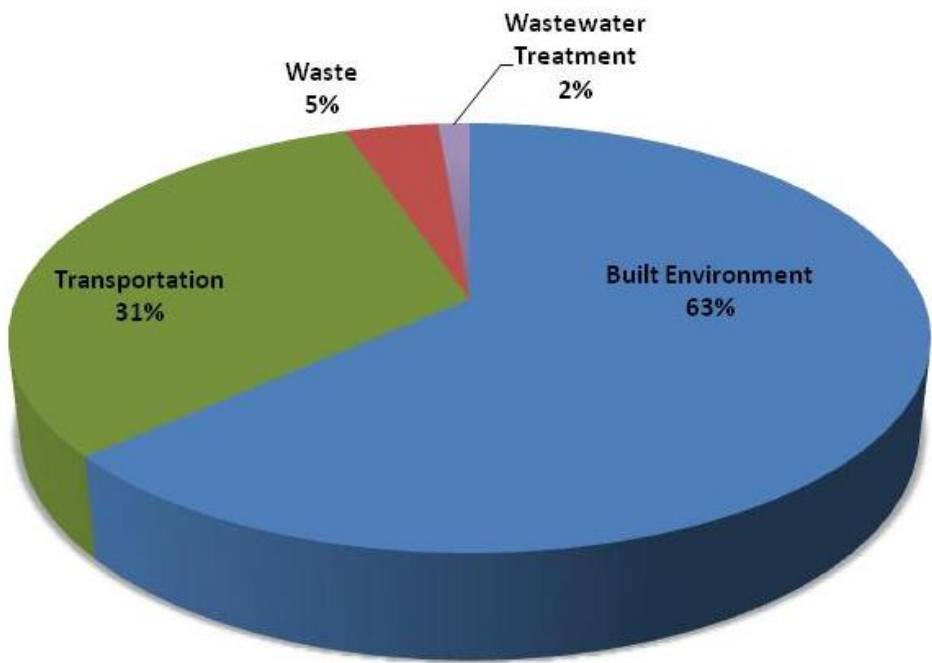
1. Atlanta's Citywide Sustainability Initiative
2. City Energy Footprint
3. Atlanta Better Buildings Challenge
4. Southface - ACBI
5. City Energy Project
6. Invest Atlanta - PACE
7. Q & A



Atlanta's Sustainability Initiative

5 Stakeholders, 10 Impact Areas...100+ initiatives





City of Atlanta Emissions 2013

Target: Reduce GHG emissions 20% by 2020 (BL2009)

Greenhouse Gas Emissions

10% Reduction citywide
7% Reduction in municipal assets
3rd party certified



Climate Action Plan

1ST Publication 2012 by GA Tech
2nd Publication 2013 by OoS
3rd party certified

Overview Energy Efficiency Goals



- Reduce citywide commercial building energy and water consumption **20% by 2020**
- Triple the renewable capacity **by 2015**



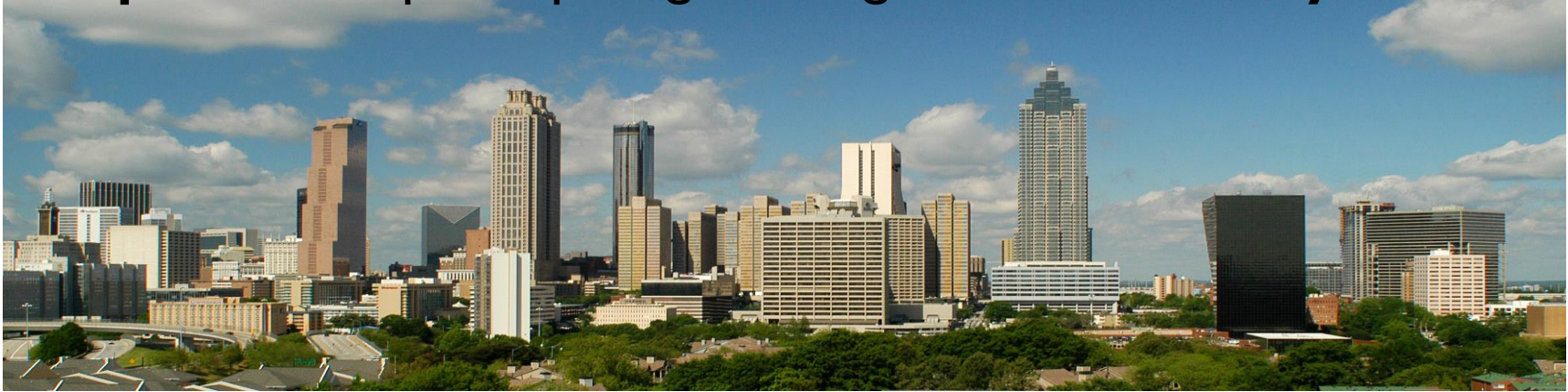
Energy Efficiency & Renewables

Water Management



Atlanta Better Buildings Challenge

Reduce **energy and water** consumption by at least **20 percent** in participating buildings across Atlanta **by 2020**



Atlanta collectively showing nearly \$3M in savings in the last year alone

404 buildings & 94M sq ft

CITY Leading by Example:

73 City Facilities

ENERGY Savings Leaders ('09 baseline):
Airport South and North Parking – **43%**

Hemphill WTC - **47%**

NEWEST participants:



ACBI

Energy Conservation Measures



The Office of Sustainability has:

- Energy modeling of all 31 active fire stations
 - 5 assessments completed
- Average of 45% energy savings with 5-7 year payback period

FIRE STATION 4



Efficiency Measure	Estimated Annual Savings (\$)	Budgetary Project Cost (\$)	Simple Payback Period (Yrs)	Estimated Annual Energy Savings	Estimated Annual Water Savings
ENERGY STAR Washer & Dryer for Non-Protective Items	3,000	3,000	1.0	4%	11%
Water-Efficient Plumbing Fixtures	2,900	8,000	2.8	6%	13%
Rainwater Harvesting Cistern	5,300	17,500	3.3	-	27%
Infiltration Control	200	1,500	7.5	2%	-
ENERGY STAR HVAC Unit	3,500	32,500	9.3	15%	-
Pilotless Range/Oven	300	3,000	10.0	2%	-
LED Lighting & Controls	4,000	48,300	12.1	15%	-
TOTAL	\$19,200	\$113,800	5.9	~ 45%	~ 50%

ACBI

Energy Conservation Measures



RM Clayton WTC

American Society of Civil Engineers
Cogeneration Project of the Year



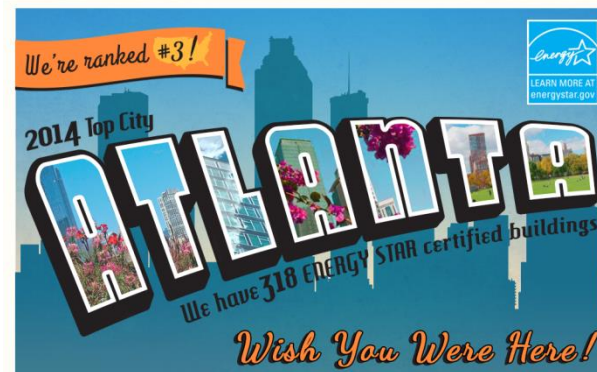
Historic Fourth Ward Park

Urban Land Institute Award 2013 –
Historic 4th Ward Park



Atlanta Civic Center

U.S. Department of Energy
1st Better Buildings Challenge Showcase



3rd Nationally - EPA Energy Star Buildings

Overview City Energy Project

- CEP is a national initiative aimed at **improving the energy efficiency of commercial buildings.**
- **Priorities**
 - Innovative economic solutions
 - cut energy bills
 - boost the local economy
 - reduce pollutionMove Atlanta toward becoming a top tier- city for sustainability.

10 mayors of large American cities have committed to making their cities stronger and healthier through the City Energy Project: Better buildings for better cities.

Atlanta
Mayor
Kasim Reed



Kansas City, MO
Mayor
Sly James



Boston
Mayor
Martin J. Walsh



Los Angeles
Mayor
Eric Garcetti



Chicago
Mayor
Rahm Emanuel



Orlando
Mayor
Buddy Dyer



Denver
Mayor
Michael B. Hancock



Philadelphia
Mayor
Michael A. Nutter



Houston
Mayor
Annise Parker



Salt Lake City
Mayor
Ralph Becker



Overview City Energy Project

- Through CEP, Atlanta will develop its own **locally tailored plan to advance energy efficiency** and reduce waste in its buildings
- The plan will integrate many strategies to promote:
 - Energy efficient building operations
 - Energy efficiency investment opportunities
- First priority
 - Defining what those opportunities are for City assets
 - Identifying ways to leverage existing programs
- Next Step
 - Benchmarking, Transparency, & Audit Ordinance





Questions

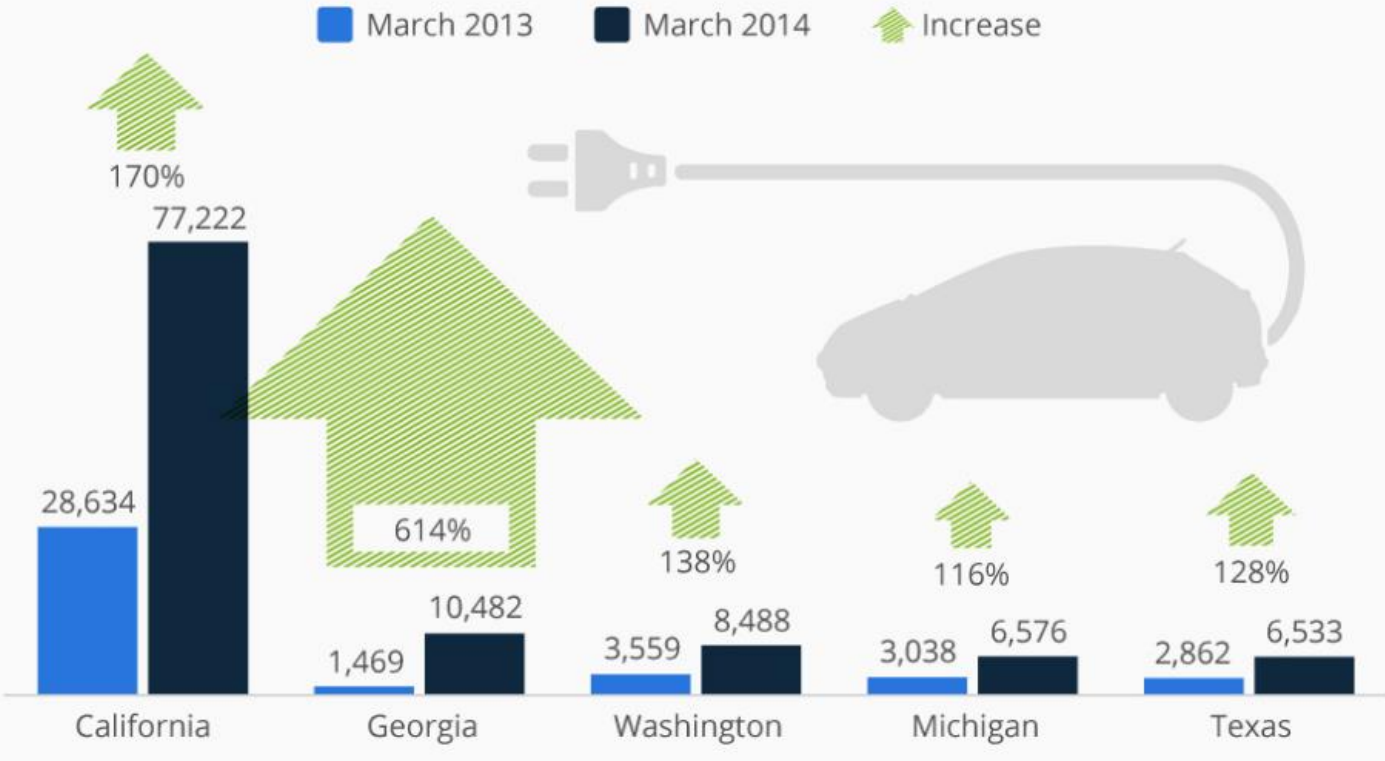


Alternative Fuel Vehicles

Atlanta's the top U.S. market for LEAF sales for 13 of past 15 months

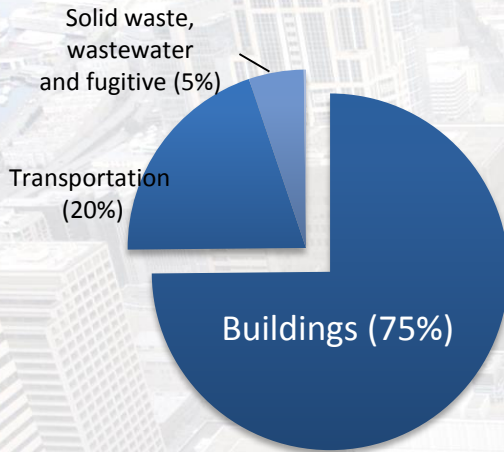
Electric Car Sales Are Skyrocketing In Georgia

Registered electric vehicles and percentage growth in the United States

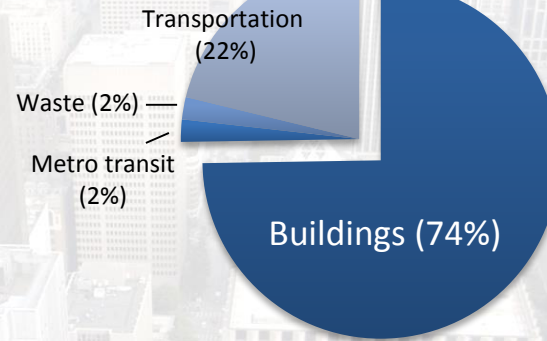


Greenhouse Gas Emissions in Major Cities

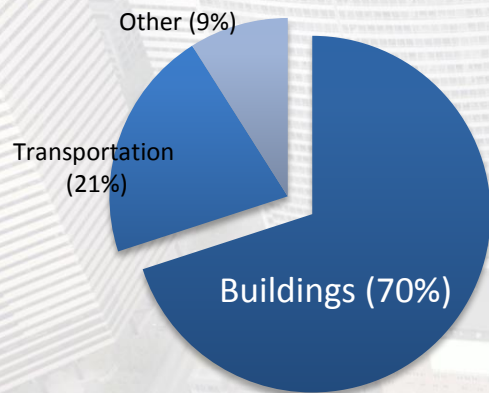
NEW YORK CITY



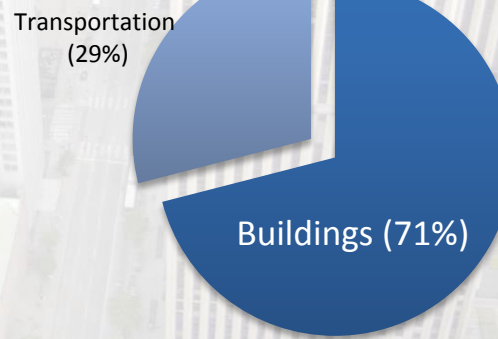
DISTRICT OF COLUMBIA



CHICAGO

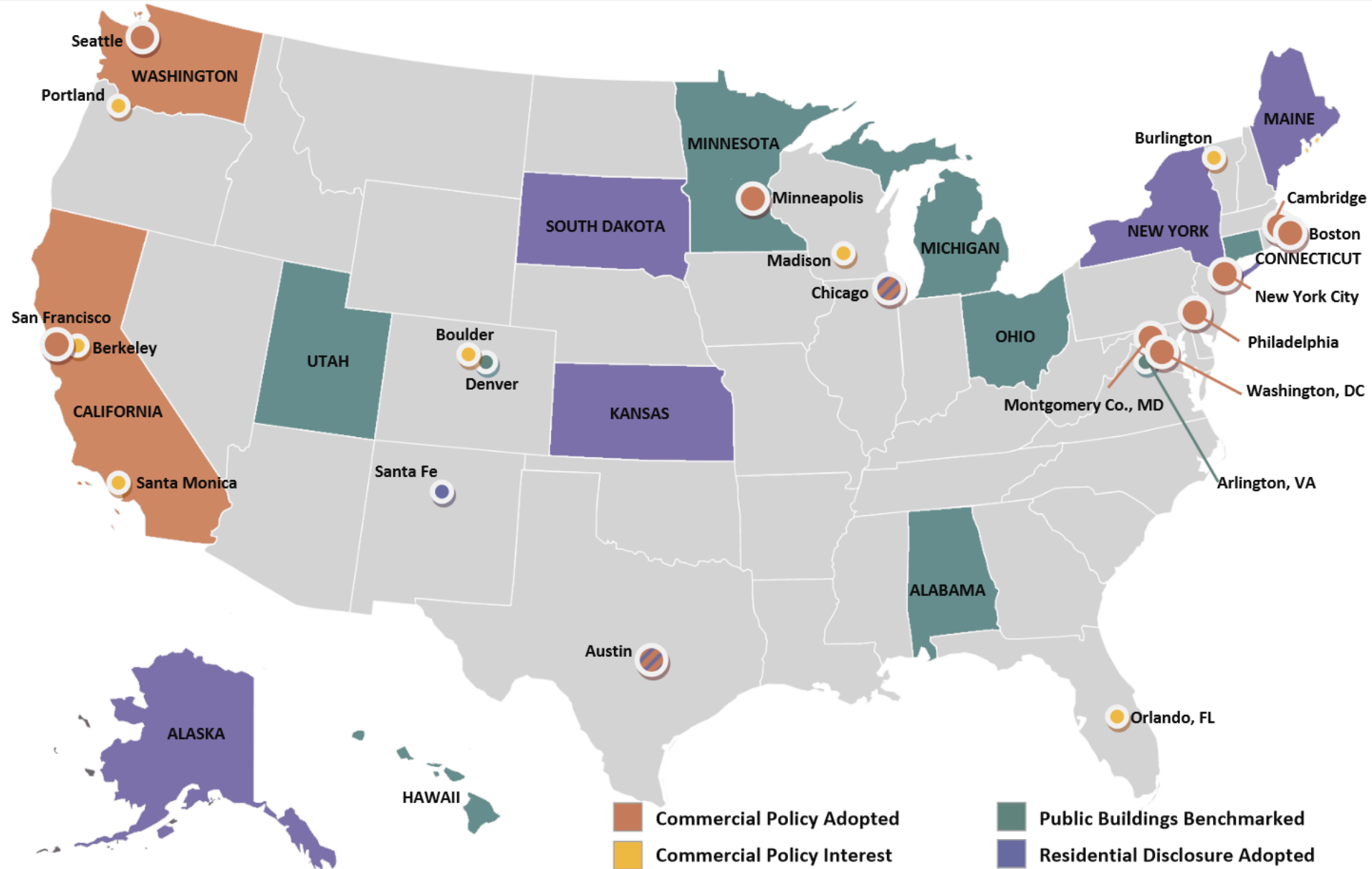


BOSTON



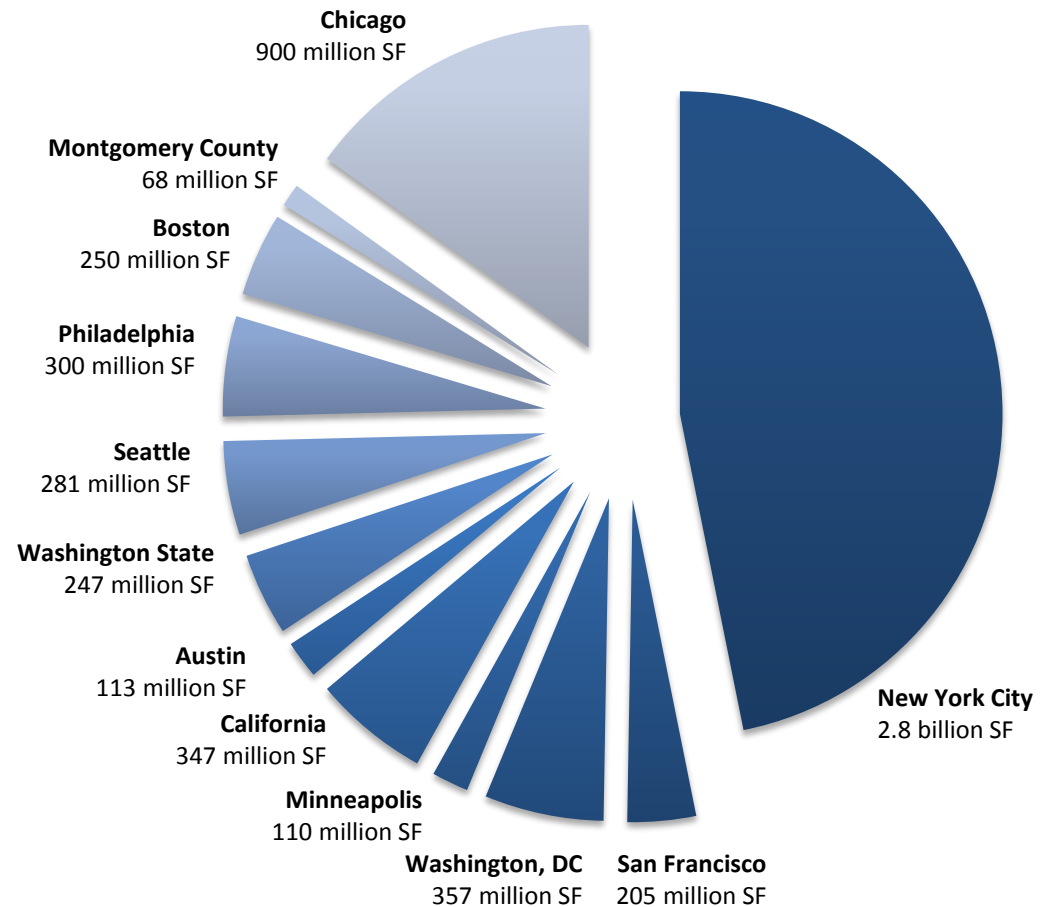
In large cities with significant public transportation, buildings typically account for 70% or more of CO₂ emissions and energy usage.

U.S. Benchmarking Policy Landscape

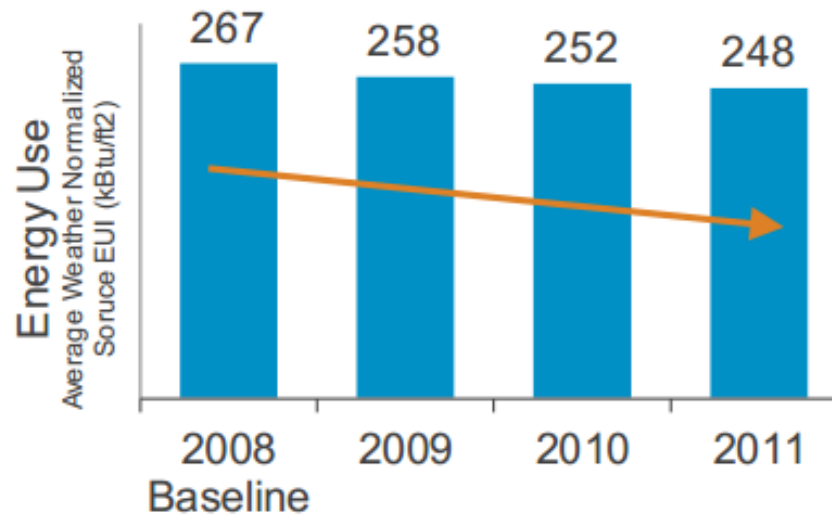


Totaling approximately **5.8 billion SF** of floor space in major real estate markets

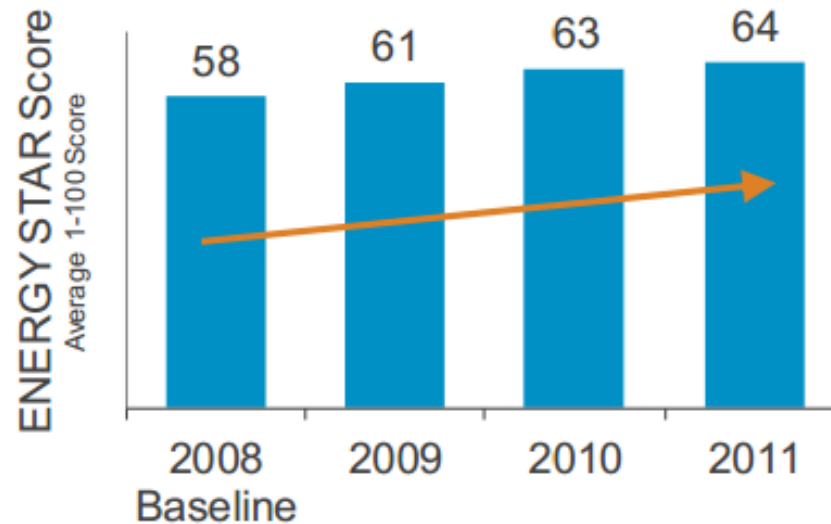
Building Area (in Square Feet) Covered Annually



According to a 2012 EPA analysis, buildings that used Portfolio Manager to track energy usage between 2008 and 2011 realized an annual energy savings of 2.4% and a total energy savings of 7%.

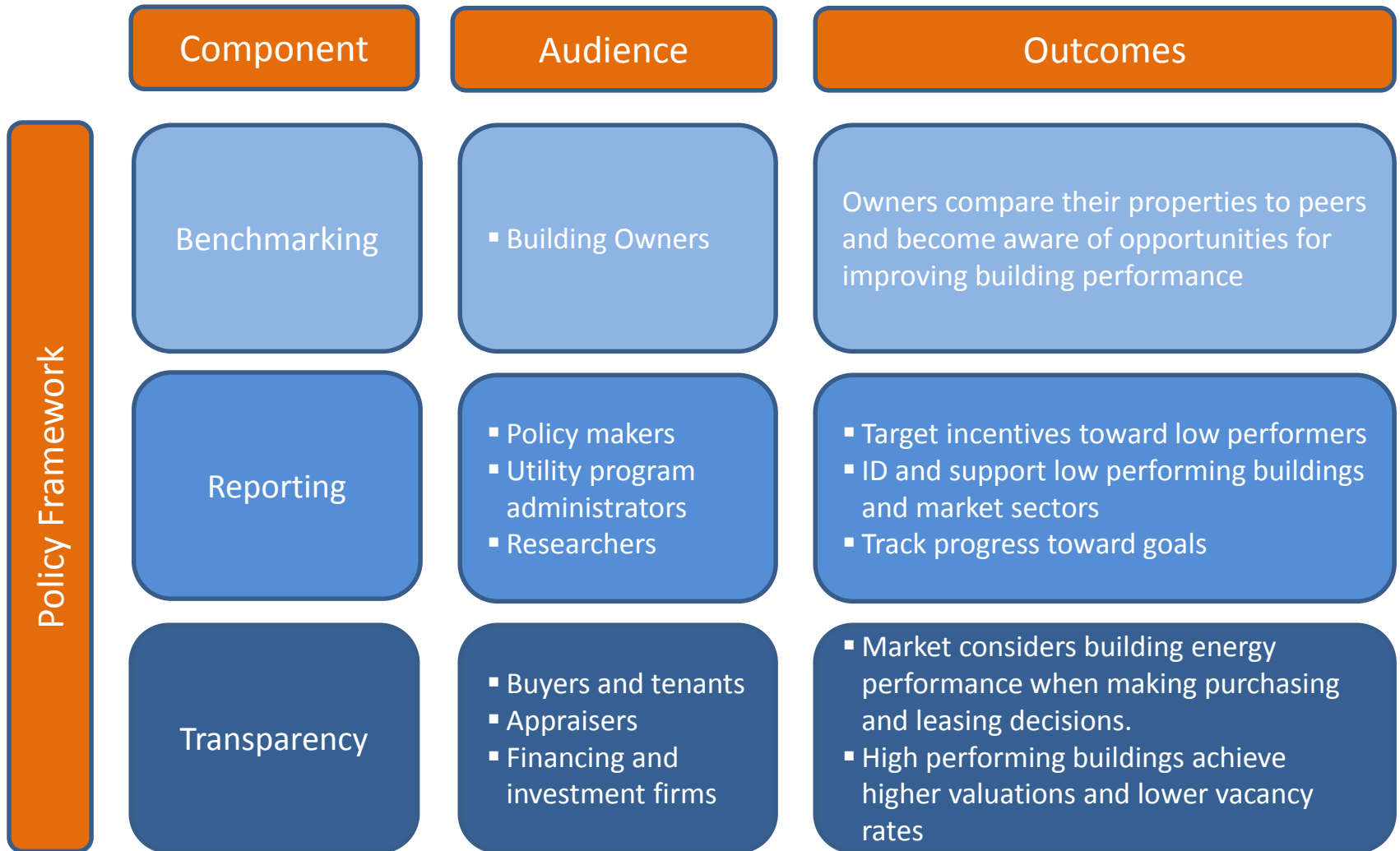


7% Savings

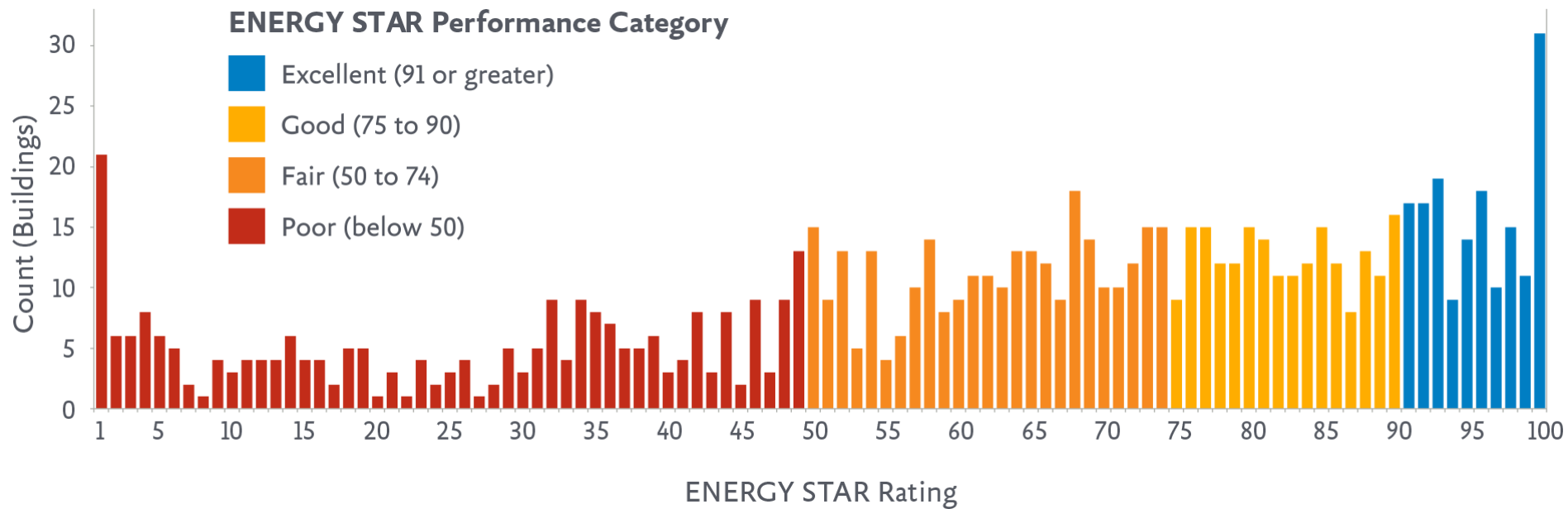


6 point increase

Features of a Benchmarking and Transparency Policy



SEATTLE ENERGY BENCHMARKING & REPORTING



Chicago's Building Energy Use Benchmarking Ordinance

Benchmarking: Non-industrial buildings >50,000 square feet required to annually benchmark energy consumption using ENERGY STAR Portfolio Manager

- Commercial buildings >250,000 sq. ft. – June 1, 2014
- Residential buildings >250,000 sq. ft. – June 1, 2015
- Commercial buildings 50,000-250,000 sq. ft. – June 1, 2015
- Residential buildings 50,000-250,000 sq. ft. – June 1, 2016

Data Verification: First year and every third year, data verification required by LA, PE, or other professional designated by the Commissioner

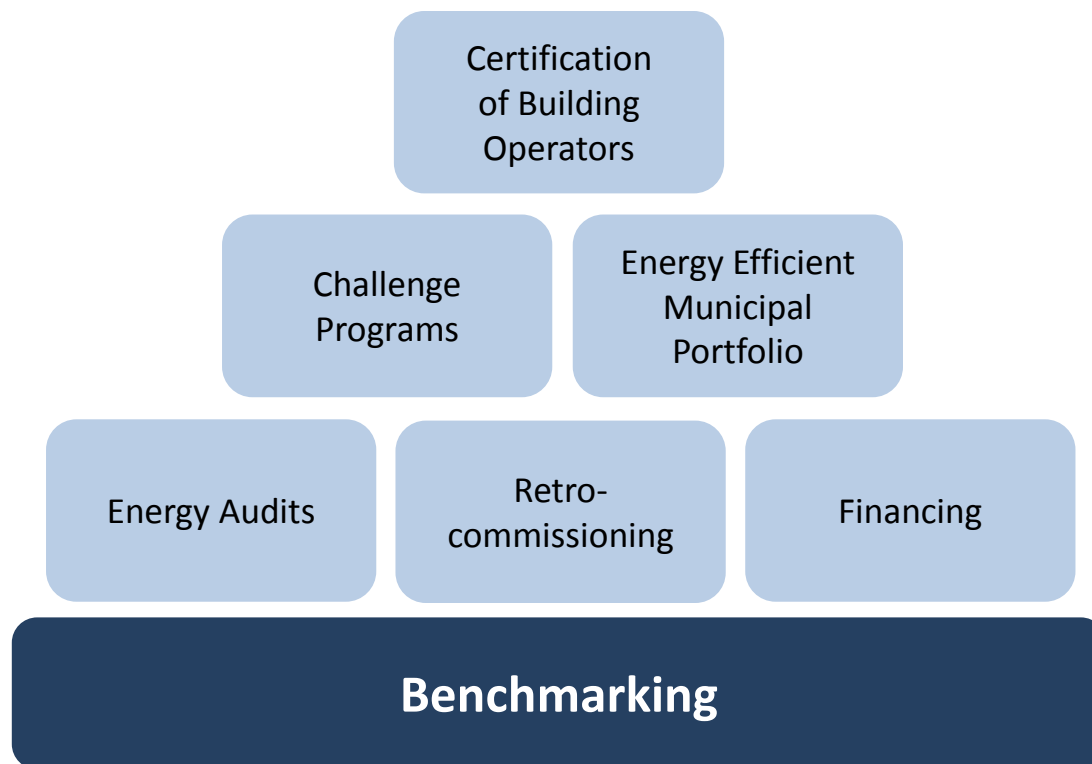
Reporting & Disclosure:

- Annual reporting to the City
- City publishes annual report on overall trends
- Building-level data publicly shared starting the 2nd year of benchmarking



Developing a Comprehensive Approach to Energy Efficiency

Benchmarking often serves as the foundation for a complimentary suite of energy efficient policies and programs



Building Benchmarking Policy Elements

Legislation				Building Type & Size Threshold			Disclosure				Rating System		Additional Elements		
Jurisdiction	Short Name	Enacted	First Compliance Deadline	Municipal	Commercial	Multifamily	To Gov't	On Public Website	Time of Transaction	To Current Tenants	Energy Star	Other	Utility Req't	Water Use Tracking	Additional Requirements
Austin	Energy Conservation Audit & Disclosure (ECAD) Ordinance	Nov 2008	June 2011	✓	10K SF+	Audits	✓	-	Buyers	-	✓	ACLARA	-	-	Audits & mandatory upgrades for multifamily buildings
Boston	Boston Energy Reporting and Disclosure Ordinance	May 2013	May 2014	✓	35K SF+	35+ units or 35K SF+	✓	✓	-	-	✓	-	-	✓	Periodic energy assessments and/or actions
Cambridge	Building Energy Use Disclosure Ordinance	July 2014	December 2014	10K SF+	25K SF+	50+ units	✓	✓	-	-	✓	-	-	✓	-
Chicago	Chapter 18-14. Building Energy Use Benchmarking Ordinance	Sept 2013	June 2014	50K SF+	50K SF+	50K SF+	✓	✓	-	-	✓	-	-	-	Verification of benchmarking data by licensed professional 1 st year, then every 3 years
District of Columbia	Clean and Affordable Energy Act of 2008	July 2008	April 2013	10K SF+	50K SF+	50K SF+	✓	✓	-	-	✓	Energy Star Target Finder	-	✓	-
Minneapolis	Chapter 47.190. Commercial Building Rating and Disclosure Ordinance	Jan 2013	May 2014	25K SF+	50K SF+	-	✓	✓	-	-	✓	-	-	✓	-
New York City	Local Law 84 (additional requirements in LL 87, LL 88)	Dec 2009	August 2011	10K SF+	50K SF+	50K SF+	✓	✓	-	-	✓	-	-	✓	ASHRAE level II audits & RCx (LL 87), lighting upgrades & submetering (LL 88)
Philadelphia	§9-3402 of the Philadelphia Code	June 2012	October 2013	50K SF+	50K SF+	-	✓	✓	Buyers, Lessees	-	✓	-	-	✓	-
San Francisco	Existing Commercial Buildings Energy Performance Ord.	Feb 2011	October 2011	10K SF+	10K SF+	-	✓	✓	†Buyers, Lessees, Lenders	✓	✓	-	†	-	ASHRAE level I or II audits or RCx every 5 years
Seattle	CB 116731	Jan 2010	October 2011	20K SF+	20K SF+	20K SF+	✓	-	†Buyers, Lessees, Lenders	✓	✓	-	✓	-	-

Overview **Atlanta Benchmarking Ordinance**

Buildings in Atlanta account for:

- **59% of Greenhouse gas emissions**
- **66% of energy consumption**

Ordinance to Implement Benchmarking, Transparency, and Audits is in City Council process

- **3.31.15 in Committee Hearing**
- **Full Council Approval in April**
- **Year 1 will cover 250M SqFt**
- **Growing to 460M SqFt**

Overview **Atlanta Benchmarking Ordinance**

Who does this apply to –

- **City Municipal buildings over 10,000 SqFt**
- **Commercial buildings**

When –

- Annual Benchmarking Requirement
- Annual Transparency Reporting through Portfolio Manager
- Audit Required once every 10 years – ASHRAE Level 2
- Retro Commissioning is optional every 10 years

Overview Atlanta Benchmarking Ordinance

<i>Property Type</i>	<i>Covered City Property</i>	<i>Covered Non-City Property, 50,000 sqft+</i>	<i>Covered Non-City Property, 25,000 sqft+</i>
<i>Date first benchmarking submission due</i>	<i>April 2015</i>	<i>90 days after passage</i>	<i>June 2017</i>
<i>Date of first benchmarking disclosure</i>	<i>July 2015</i>	<i>September 2016</i>	<i>September 2017</i>

Overview PACE

Property Assessed Clean Energy



Goal:

- Support citywide environmental sustainability efforts
- Finance energy and water savings projects
- Provide access to private capital for building retrofits

Structure:

- Create \$500 million pool of private capital for projects
- Provide upfront cash for building improvements
- Owners repay over 20 years, billed with property tax

Overview PACE

Property Assessed Clean Energy



Background:

- Atlanta City Charter amended to allow PACE financing
- Fund manager and investor identified

Next Steps:

- Pilot program to require approval from banks
- Prepare for bond validation and issuance
- Develop plan for billing with annual property tax
- Launch program in mid 2015

Q & A - Contact



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