



Building Energy – Next Generation Policy
Seattle Office of Sustainability & Environment
October 13, 2015



GOAL FOR CLIMATE ACTION PLAN

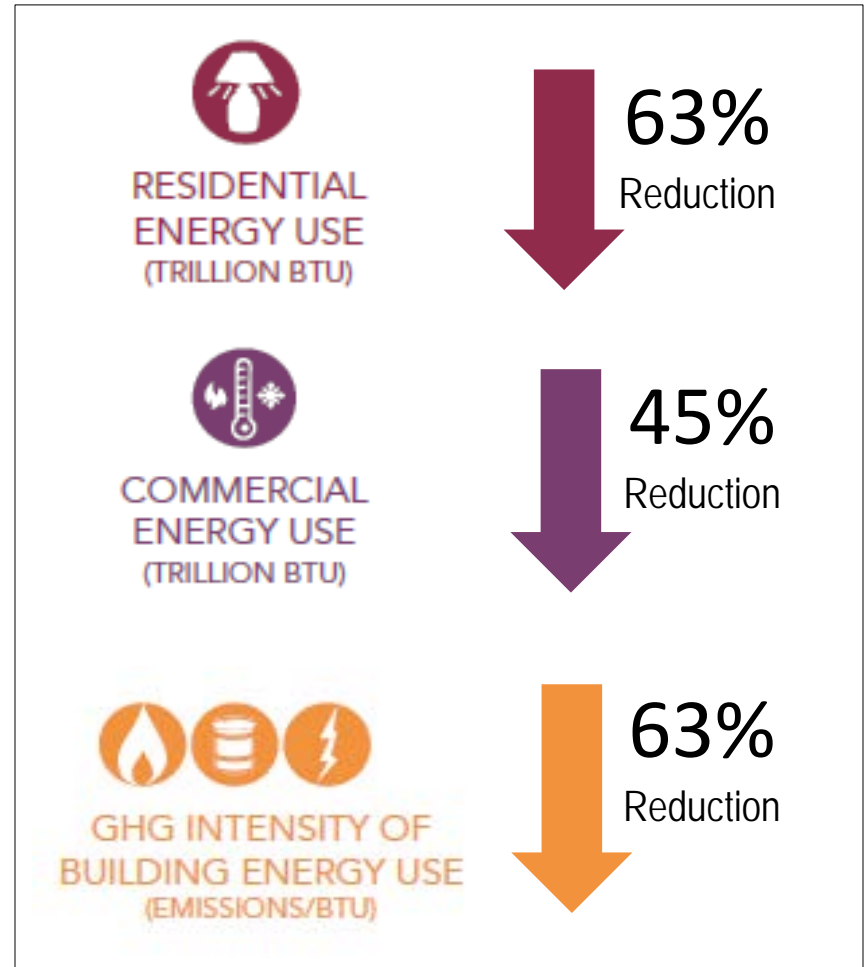
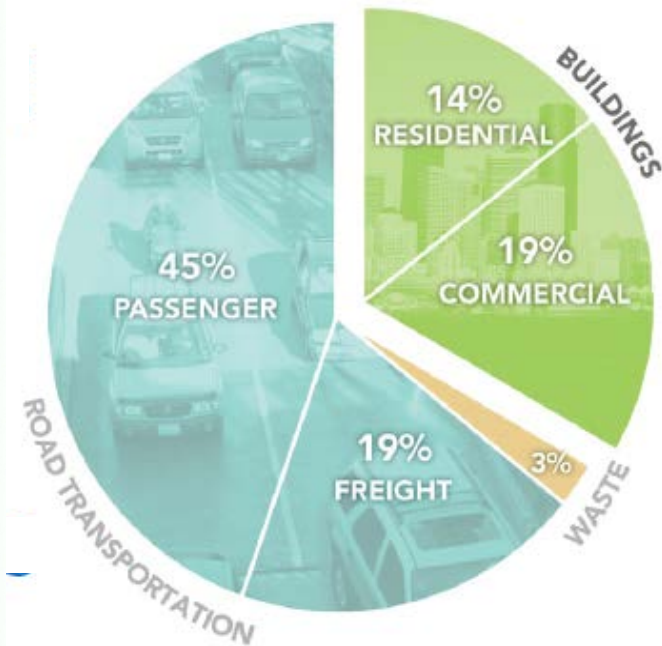
Reduce GHG emissions and prepare for climate impacts while building vibrant neighborhoods, fostering economic prosperity and enhancing social equity.





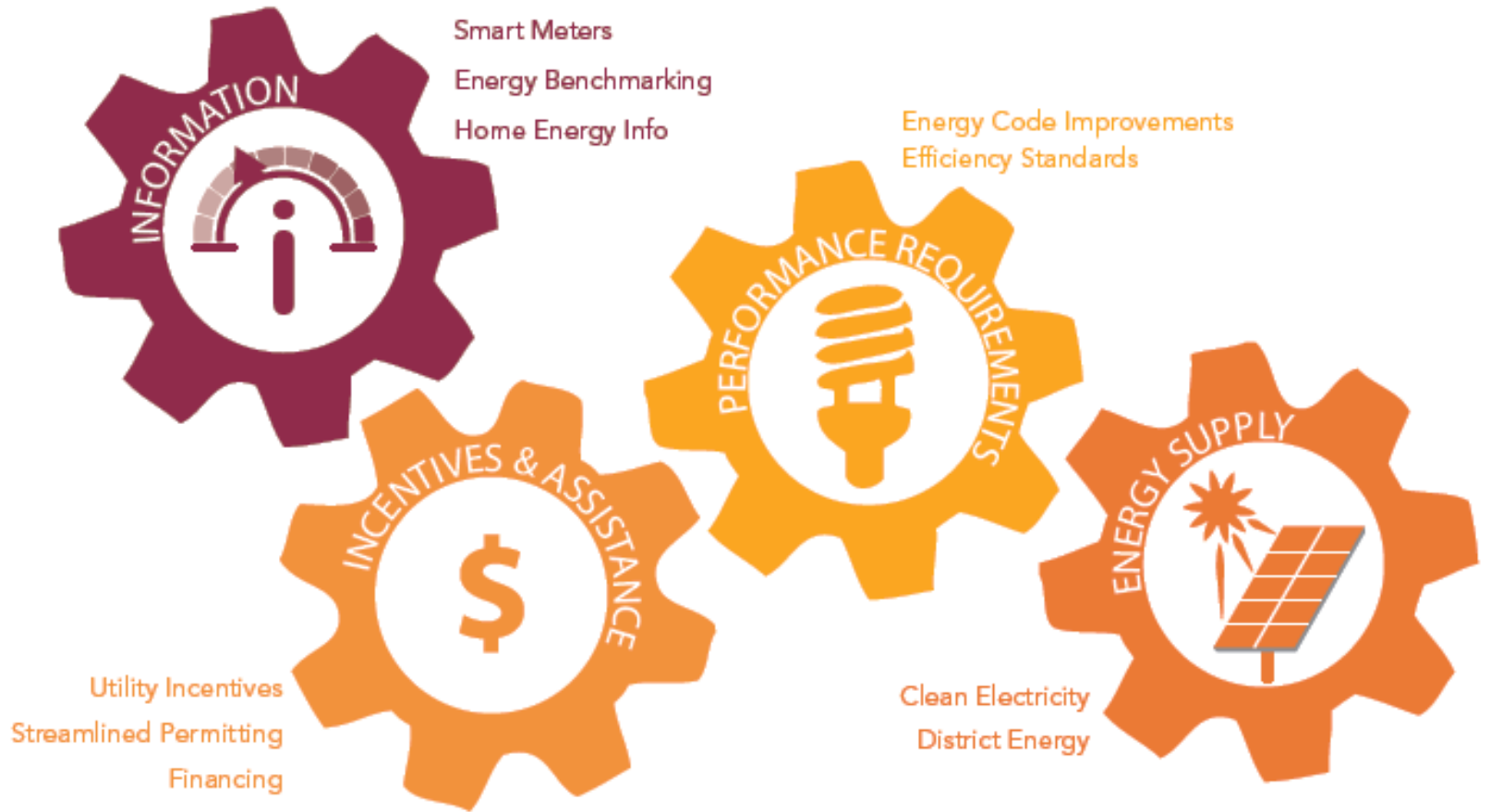
CAP BUILDING ENERGY TARGETS

2050 ENERGY AND CARBON GOALS





CAP STRATEGY FOR BUILDINGS





CAP WORK TO DATE

Commercial & Multifamily Buildings

LEADERSHIP (City Facilities)

- ✓ Develop Resource Conservation Management Plan
- ✓ Publish City energy benchmarking scores

INCENTIVES

- Pilot retro-commissioning incentives
- Pilot pay for performance incentives
- State authority for tax incentives for rental housing retrofits
- Update Living Building pilot

REGULATIONS

- ✓ Minimum energy requirements for substantial alterations
- ✓ Increase efficiency standards in each code cycle
- ✓ Outcome-based code option



PROGRESS TO DATE

Emissions Reductions

Building Energy Use (2008-2050)

Target Reduction: 1.25% / year

Actual 2008-2012: 0.75% / year

Carbon Content of Fuels (2008-2050)

Target Reduction: 1.5% / year

Actual 2008-2012: 1.75% / year

Overall Building Emissions (2008-2050)

Target Reduction: 2% / year

Actual 2008-2012: 2.50% / year



PROGRESS TO DATE

Emissions Reductions

Commercial Building Energy Use (2008-2050)

Target Reduction: 1.10% / year

Actual 2008-2012: 0.25% / year

Residential Building Energy Use (2008-2050)

Target Reduction: 1.5% / year

Actual 2008-2012: 1.25% / year



NEXT STEPS IN CLIMATE ACTION

- Policy Legislation this Fall/Winter
 - Energy Benchmarking Transparency
 - Periodic Tune-Ups for Large Commercial Buildings
- Additional Supporting City Actions
 - Energy & GHG Targets by Building Type
 - Benchmarking Performance Reports
 - SCL Incentives
 - DPD Energy Code
 - Continued Investigation of Additional Actions



WHY IS THIS IMPORTANT?

The importance of holistic policy frameworks

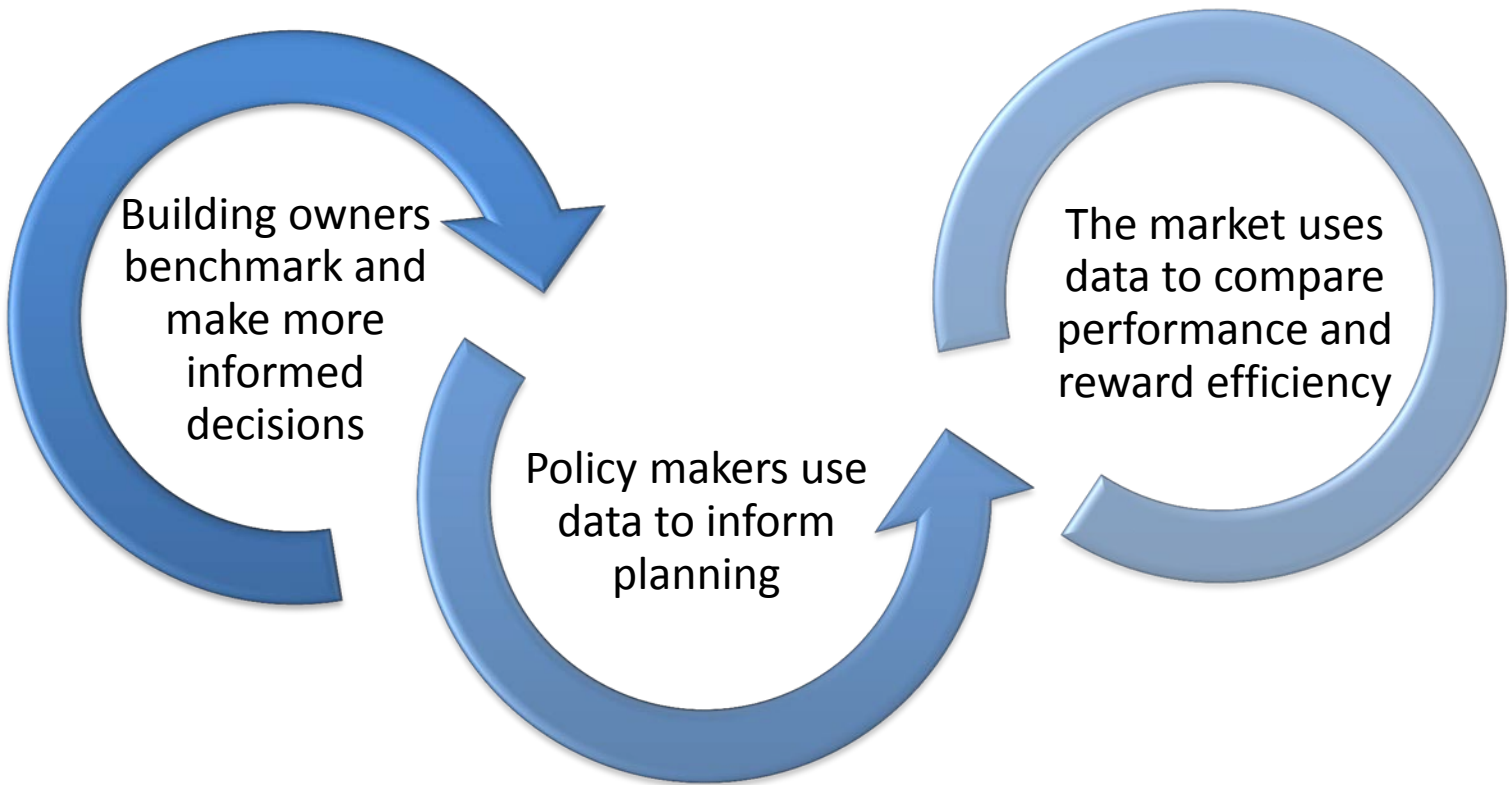
City	Program Components	Energy Savings for Benchmarked Buildings
New York City ¹ 2010 - 2013	Benchmarking & Transparency Audits (2013) Lighting Upgrades (2025)	5.7% (over 3 years) 9.9% carbon savings
Washington, D.C. ² 2010 - 2012	Benchmarking & Transparency	6% (over 2 years)
Seattle ³ 2011 - 2013	Benchmarking	0.6% (over 2 years)

1. US Department of Energy. *New York City Benchmarking and Transparency Policy Impact Evaluation Report*, May 2015. (p. ii)
2. District Department of the Environment. *Green Building Report for the District of Columbia*, 2012. (pp. 31-32). Note that reporting and disclosure for all 3 years occurred together in 2013.
3. Seattle Office of Sustainability & Environment. *Building Energy Analysis Report 2013*. (Executive Summary)



BENCHMARKING TRANSPARENCY

Why Transparency?

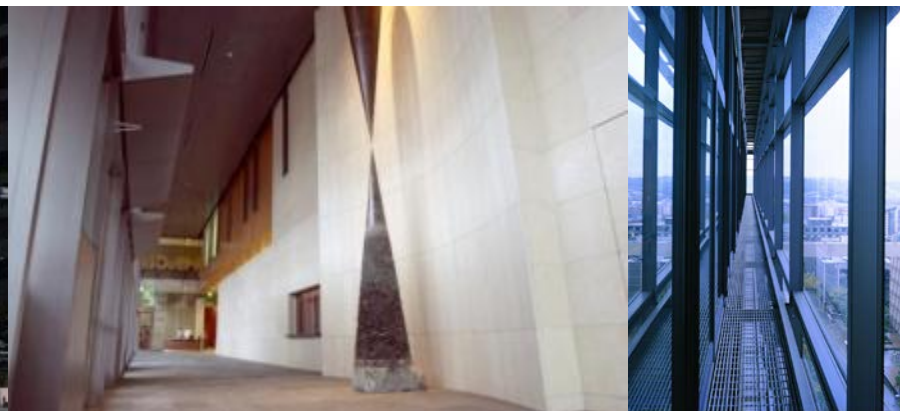




BENCHMARKING TRANSPARENCY

Key Elements of Legislation

- Benchmarking energy and carbon info available online
- Transparency would start with 2015 data, reported in 2016
- No change to owner submittal requirements





BUILDING TUNE-UPS

Why Tune-Ups?

- Ensure energy and water are not needlessly wasted by optimizing building performance
- Promote active management of building systems
- Tune-ups yield 5-20% energy savings and pay back in 2-3 years, on average





BUILDING TUNE-UPS

Key Elements of Legislation

- Non-residential buildings $\geq 50,000$ sq ft
- Phased in by building size, beginning in 2018
- Tune up every 5 years
- Focused on operational improvements, not capital upgrades
- Exemptions for evidence of good performance



TIMELINE FOR POLICIES

Stakeholder Outreach	Spring-Winter 2015
Considered at Council	December 2015
Director's Rules (Rulemaking also includes public outreach)	Spring 2016
Publicizing 2015 Benchmarking	Fall 2016
First Tune-Ups	Fall 2018



QUESTIONS & DISCUSSION

Christie Baumel

Seattle Office of Sustainability & Environment

(206) 233-7173

christie.baumel@seattle.gov