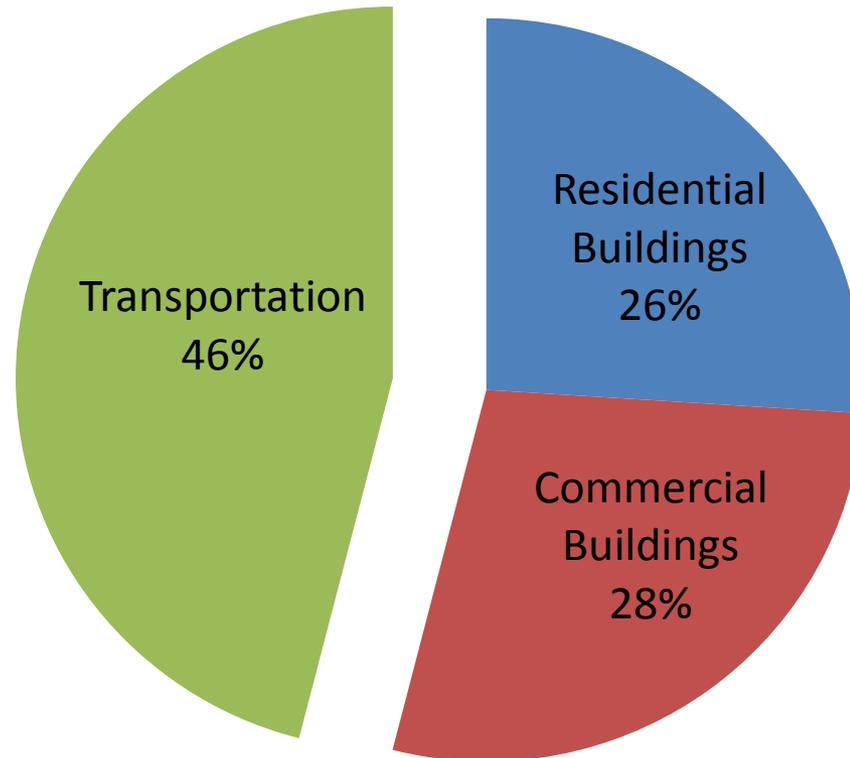


Building Energy Saving Ordinance: Accelerating Savings with Energy Information Disclosure

Berkeley City Council Workshop
November 18, 2014

54% of Greenhouse Gas Emissions Come from Buildings



Update Process

1. Researched existing policies
2. Learned from Federal Stimulus funded Money for Energy Efficiency (ME2) Program
3. Broad community engagement
4. Looked at ways to prioritize high opportunity buildings to achieve savings
5. Conducted options analysis
6. Developed workflows & implementation plan

Update Provides New Approach

Current RECO CECO

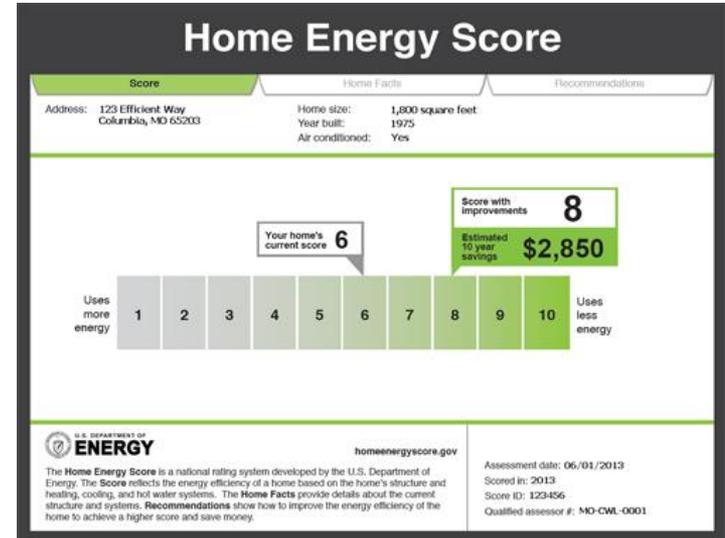
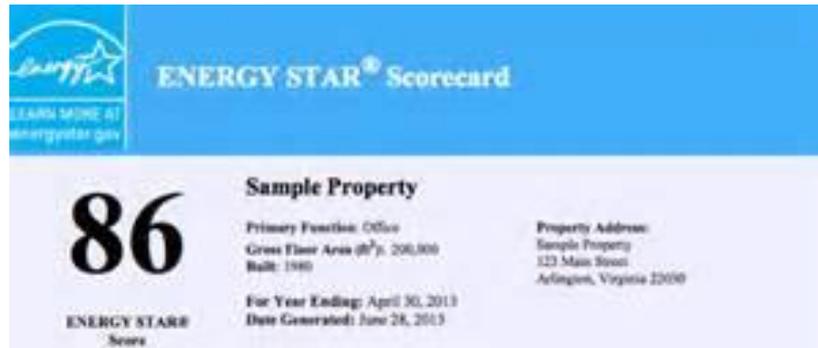
- Must install minimum mandatory measures
- Required only when property sold or remodeled
- Status available by email

Energy Saving Ordinance

- No minimum measures
- Energy audits required for all buildings
- Energy information reported publicly
- Efficient buildings are exempt from audit provision
- On-ramp to rebates & incentives
- On-line compliance process and user-friendly compliance tracking

Energy Information

- Benchmarks & Scores



- Audit Reports

Energy Conservation Measure	Demand Savings (kW)	Annual Electricity Savings (kWh)	Annual Natural Gas Savings (therms)	Total Annual Cost Savings (\$)	Implementation Costs (\$)	Simple Payback before incentives (Years)	Potential Energy Incentives
Replace Incandescent and Halogen Lighting with	8.4	36,680		\$6,066	\$9,017	1.5	\$1,100

Benefits of Energy Information Reporting

- Shows property owners how to reduce energy costs & increase property values
- Provides building-specific recommendations to maximize efficiency, health, safety & comfort
- Identifies potential health & safety issues
- Teaches owners how to access valuable financing & incentive opportunities
- Motivates property owners to invest in energy-saving improvements

BESO Requirements

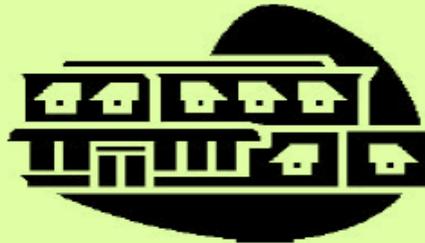
Large Buildings

25,000 sq ft or more



Medium Buildings

5,000-24,999 sq ft



Small Buildings

Up to 5,000 sq ft &
1-4 residential units

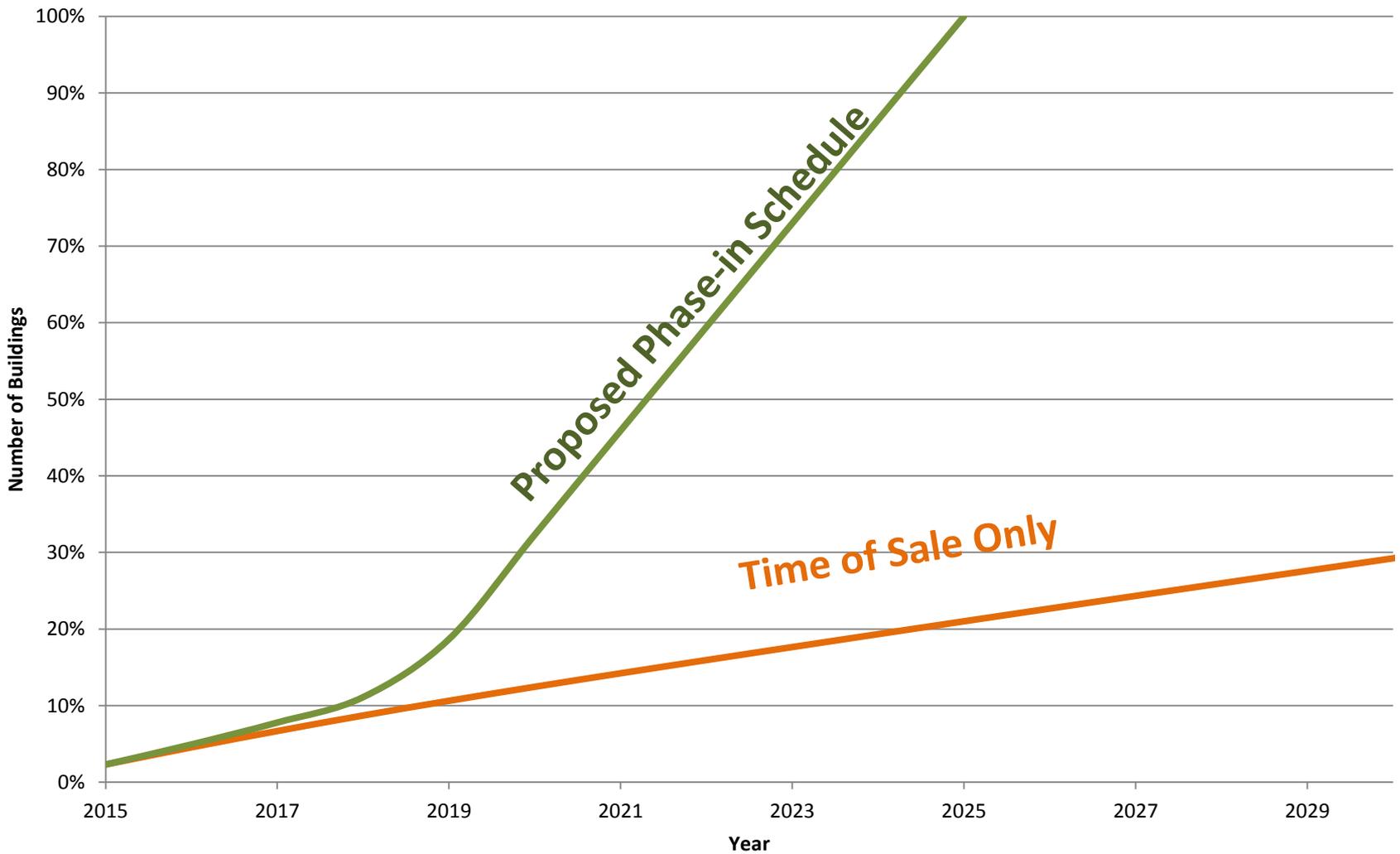


Owners must report energy use every year. Buildings must undergo an energy efficiency audit every 5 years.
Phase-in starting in 2016

Buildings must undergo an energy efficiency audit every 8 years or at time of sale (whichever comes first)
Phase-in starting in 2018

Buildings must undergo an energy efficiency audit every 10 years or at time of sale (whichever comes first)
Phase-in starting in 2020

Total Buildings under BESO Compliance Options



BESO Costs & Incentives

Building Type	Estimated Audit Costs (plus filing fee)	Incentives
Commercial	\$0.05 - \$0.20/sq ft	Smartlights free lighting audit Lighting fixture rebates HVAC rebates On-bill finance PACE finance
Multifamily	\$40 - \$300/unit	Smartlights free lighting audit BayREN free technical assistance Incentive up to \$750/unit PACE finance
Single Family (1-4 unit)	\$200 - \$600	Energy Upgrade incentive up to \$6,500 PACE Finance

Building Energy Saving Ordinance

- Motivates owners to invest in efficiency
- Leverages valuable resources
- Keeps money in the community
- Improves the value of efficient buildings

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