



7th Annual Statewide Energy Efficiency Forum

Beyond the Energy Code: Exploring the Value of Forging Ahead

City of Los Angeles
June 16, 2016

What does a reach code mean for Los Angeles?

Cool Roofs

- As of October 1, 2014, the LA Green Building Code requires roofing material in residential buildings meet certain values for the “aged solar reflectance” and “thermal remittance” or for “SRI”
- Exceptions:
 - Roof repair
 - Roof replacement when the roof area being replaced is equal to or less than 50% of the total roof area
 - Where building integrated photovoltaic (BIPV) are installed
 - Permits issued prior to January 1, 2015 for the replacement of an existing roof with asphalt roof shingles or asphalt composition roll roofing



	Min. 3-yr Aged Solar Reflectance	Min. Thermal Emittance	SRI
Low-slope $\leq 2:12$	0.63	0.75	75
Steep-slope $> 2:12$	0.20	0.75	16

What does a reach code mean for Los Angeles?

Water code changes

As of June 6, 2016 the LA Green Building Code requires:

- commercial and residential buildings to install plumbing fixtures and fittings to ensure a 20% reduction of water use;
- a water budget for landscape irrigation consistent with the statewide Model Water Efficient Landscape Ordinance;
- sub-metering in new multi-family dwellings and commercial buildings over 50,000 square feet; and
- additional water conservation measures to reduce water use and maximize the use of recycled water and graywater.



What does a reach code mean for Los Angeles?

Existing Buildings!!!

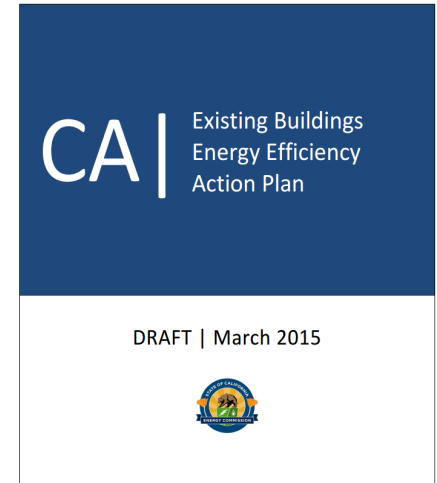
- LADWP adopted a target to achieve 15% of their energy supply mix through efficiency efforts by 2020; 50% more aggressive and three years earlier than required by the state.
- Mayor Garcetti signed an Executive Directive to reduce per capita potable water use by 20% by 2017 and reduce DWP's purchase of imported potable water by 50% by 2024.
- Statewide program in progress through AB 758 to reduce energy use in all existing buildings statewide and Governor Brown's water mandates.

December 3rd, 2014:
City Council Motion
14-1478 initiated an
effort to:

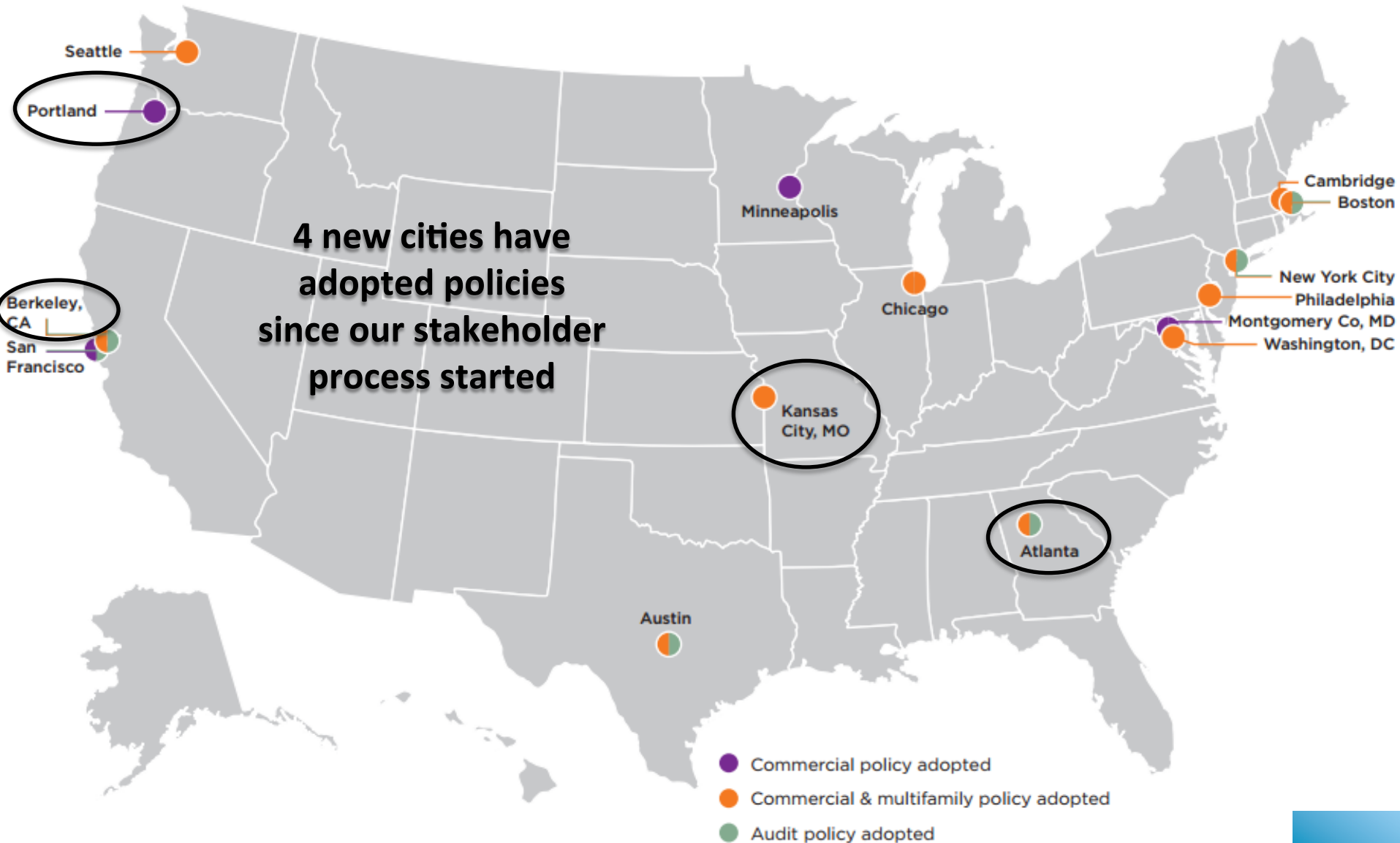
*"convene a
stakeholder process
to develop a
program to improve
the energy and water
efficiency of existing
buildings."*

Consistent with State and City Efforts

- SB 350, the Clean Energy and Pollution Reduction Act of 2015 ("Golden State Standards") adopted
 - Double energy efficiency
 - 50% of electricity from renewable resources
- AB 758 Action Plan adopted
- LA's Sustainable City pLAn released
 - 30% reduction in energy use per square foot by 2035
 - 25% reduction in water use per capita by 2035
 - 80% reduction in GHG emissions by 2050



We Can Learn from Other Cities



Trends and Best Practices from Other Cities

Create
Transparency

Trigger
Action

Ensure
Continuous
Improvements

Energy and Water Benchmarking

Reporting and Disclosure

Building Energy and Water Audits

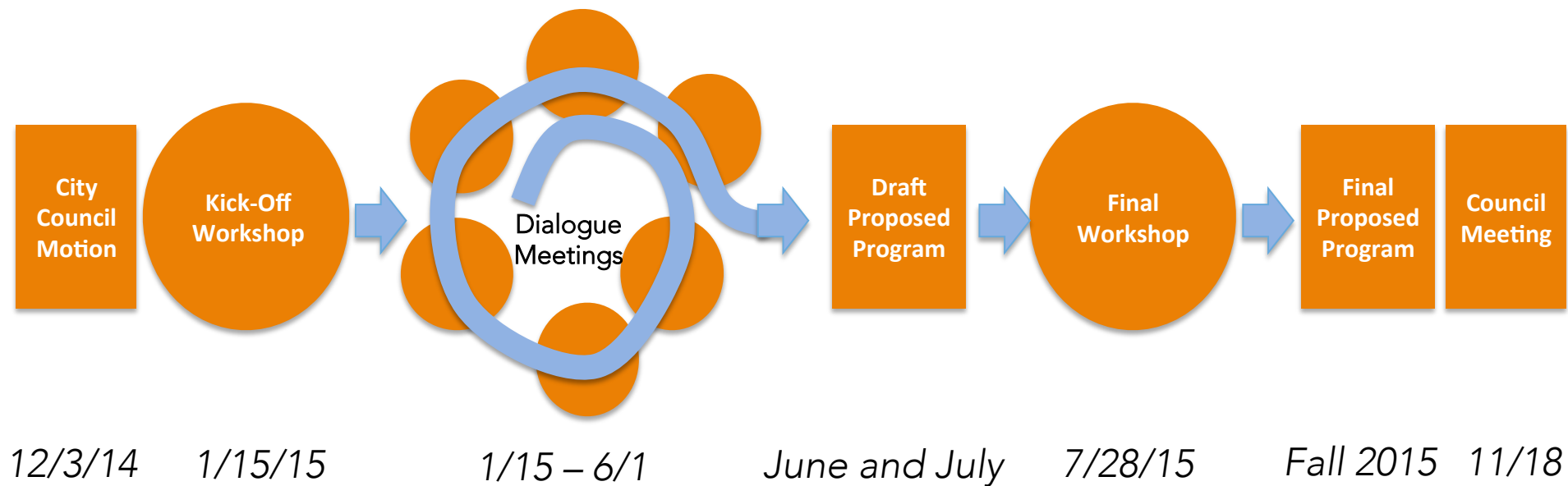
Retrocommissioning

Targeted Retrofits

Sub-metering

Alignment with Utility Programs

Stakeholder Process Overview



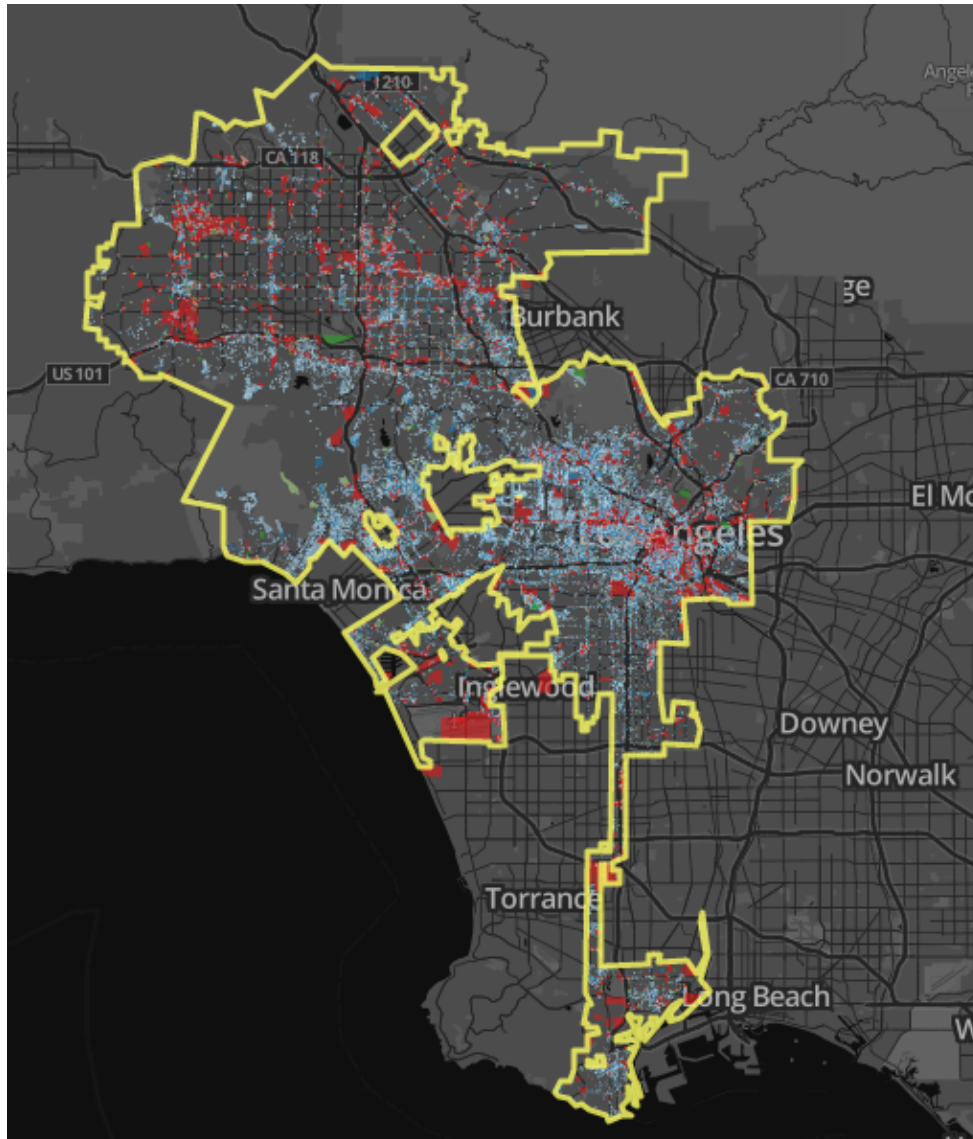
Non-traditional Code Development

- Los Angeles Chamber of Commerce
- Los Angeles Business Council (LABC)
- Los Angeles Alliance for a New Economy (LAANE)
- Strategic Concepts in Organizing & Policy Education (SCOPE)
- IBEW Local 11
- Apartment Association of Greater Los Angeles (AAGLA)
- California Apartment Association (CAA)
- Affordable housing owners
- Building Owners & Managers Association (BOMA)
- US Green Building Council (USGBC) – LA Chapter Existing Building Committee, Westside Branch and SFV Branch
- Central City Association (CCA)
- California Energy Commission (2x)
- Clean Energy Coalition
- Energy Upgrade California
- Tenant group representatives
- American Institute of Architects (AIA)
- LA Better Buildings Challenge (LA-BBC)
- Southern California Gas (SoCalGas)
- Building Industry Association (BIA)
- Institute of Real Estate Managers (IREM)
- Valley Industry and Commerce Association (VICA)
- International Facilities Managers Association

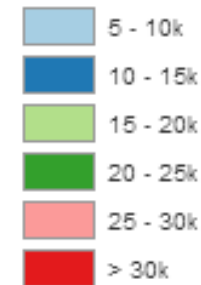
Where is energy being used?

Built Square Footage	Percent BTUs	Percent of Total Parcels	Number of Parcels
>50,000sf	33.7%	0.8%	5,178
>40,000sf	35.3%	1.0%	6,746
> 30,000sf	37.8%	1.4%	9,467
> 25,000sf	39.2%	1.7%	11,621
> 20,000sf	41.4%	2.2%	14,959
> 15,000sf	43.9%	3.0%	20,048
> 10,000sf	47.3%	4.4%	29,717
> 5,000sf	54.8%	9.9%	66,614

Large buildings are located throughout the city



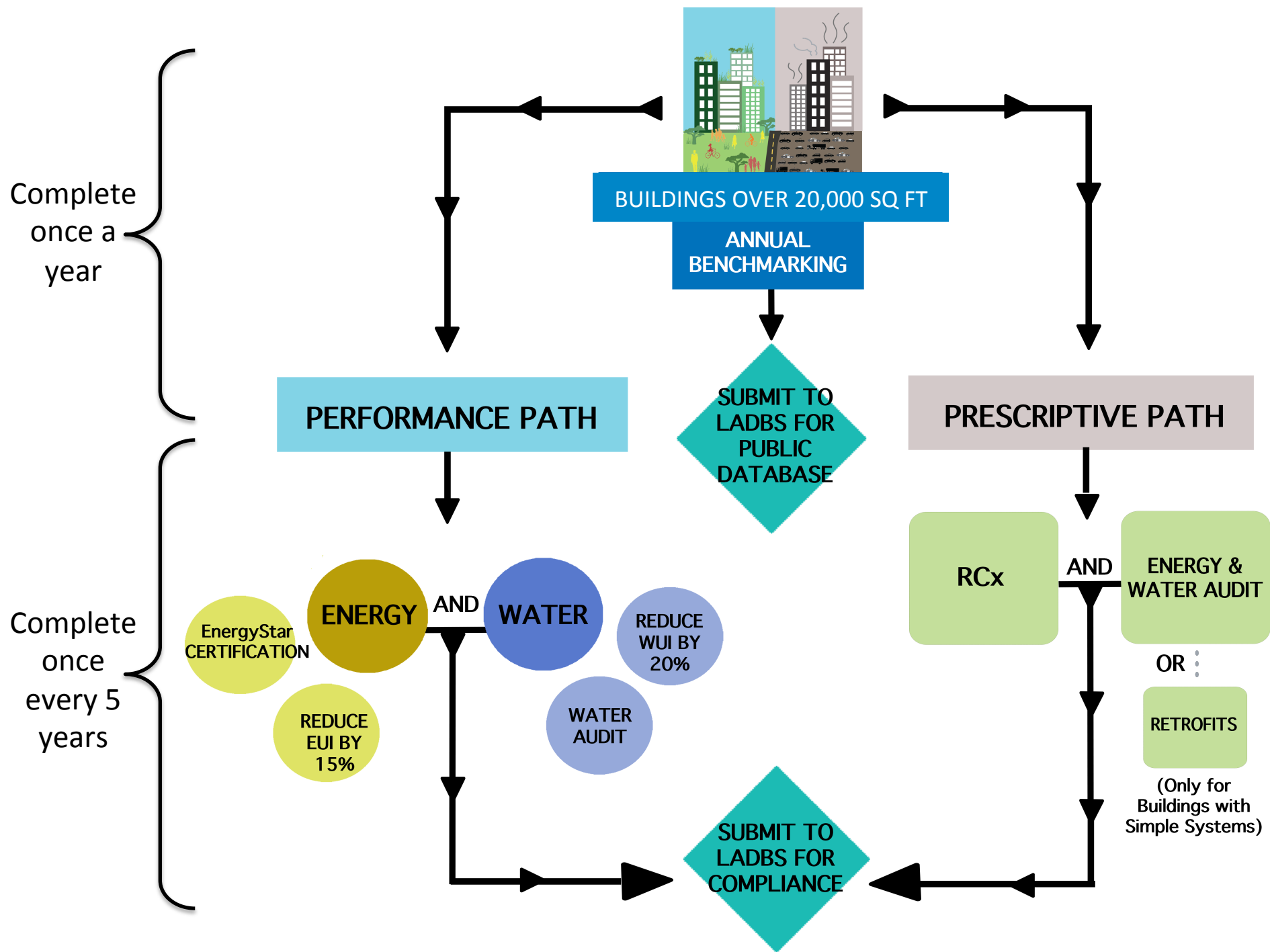
Building Size Categories
(Square Feet)



Policy Program Overview

- Buildings will be required to benchmark their energy and water use using Energy Star Portfolio Manager and submit key output to the Department of Building and Safety once a year
- Benchmarking output information will be available on a public website
- Building owners will opt into one of two pathways to reduce energy and water consumption once every five years





Supporting Programs and Organizations



- Support building owners to take early action



- Offer various programs to assist with financing



LOS ANGELES

- Conduct outreach to educate building owners and property managers

Next Steps



LAexistingbuildings.org