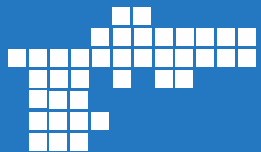


City of West Hollywood Green Building Program Update

Stakeholder Working Group Meeting #1

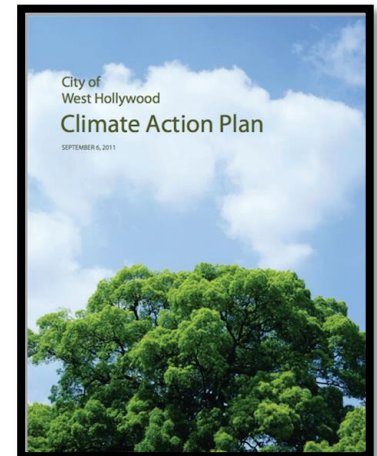
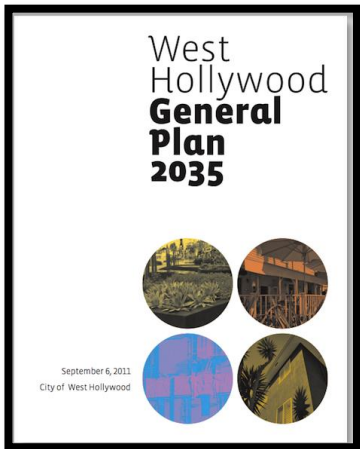
April 12th, 2018



City of West Hollywood
California 1984



Green Building Local Context



West Hollywood General Plan 2035

Green Building (Section 9-4)

- *The Green Building Ordinance addresses construction and demolition waste, requires new buildings to anticipate future solar panel installations, regulates use of materials with volatile organic compounds, requires Energy Star appliances, requires transportation demand management strategies and minimum bicycle facilities, and refers to and builds upon California Title 24 standards (2007) for energy performance.*
- *The Green Building Ordinance also includes a point system for new construction with incentives for projects that achieve “exemplary” status. Specifically, the point system was designed to emphasize locally-available materials, encourage green elements to be incorporated early into project design, and provide flexibility to alter green elements as the project evolves. A Green Building Resource Center, located on the second floor of City Hall, provides a sampling of green building materials, practices, and additional information for community members and developers.*





Green Building in Climate Action Plan (2011)

- **Green Buildings**
 - Continue Green Building Resource Center
 - Require all NC to achieve CALGreen Tier II Energy Efficiency Standards
- **Reduced energy use**
 - Update the Green Building Ordinance to require smart grid energy management and compatible HVAC and lighting in new construction
- **Reduced energy demand**
 - Require that all new construction and condominium conversions be sub-metered
 - Require recycled materials for 20% of construction materials in all new construction
- **Reduced water use**
 - Reduce per capita water consumption by 30% by 2035
- **Green roofs and roof gardens**
 - Establish a green roof and roof garden program to standardize, promote, and incentivize green roofs and roof gardens throughout the City

Green Building in the Zoning Code

19.20.060

1. Construction & Demolition Waste
2. Storm Drains
3. Future Photovoltaic
4. Construction Air Quality Management Plan
5. Interior Paints & Wood Finishes
6. Energy Star Appliances
7. Permeable Surfaces
8. Water Conservation
9. Storm Water Diversion
10. Alternative Transportation
11. Water Saving Features
12. Recyclable Materials Storage
13. Energy Efficient Outdoor Lighting
14. Parking Landscaping for Surface Parking Areas
15. Transportation Demand Management
16. Construction Debris Control
17. Environmental Protection, Pollution, and Solid Waste
18. Energy Efficiency

1. Construction & Demolition Waste

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• Projects shall divert a minimum of 80% (Section 19.20.060)	<ul style="list-style-type: none">• Projects shall divert a minimum of 65%, or meet stricter local ordinance (Section 5.408.1)	<ul style="list-style-type: none">• MR Credit: Construction & Demolition Waste Management<ul style="list-style-type: none">○ Option 1: Diversion<ul style="list-style-type: none">➤ Path 1: Divert 50%➤ Path 2: Divert 75%○ Option 2: Reduction of total waste material<ul style="list-style-type: none">➤ Do not generate more than 2.5 lbs construction waste/sq ft of building's floor area

2. Storm Drains

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• Storm drains in the right-of-way must be labeled	<ul style="list-style-type: none">• Local ordinance.<ul style="list-style-type: none">○ Comply with a lawfully enacted stormwater management and/or erosion ordinance• Best management practices.<ul style="list-style-type: none">○ Drainage swales or lined ditches to control stormwater flow○ Protection of storm drain inlets (gravel bags or catch basin inserts) <p>(Section 5.106)</p>	<ul style="list-style-type: none">• N/A

3. Future Photovoltaic

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• Projects shall provide a roof layout plan illustrating how future installation of a photovoltaic system could be accommodated• Projects shall install a conduit from the roof to the electrical room, or electrical panels if no electrical room is provided, to accommodate future photovoltaic system installation. Tenant improvements are exempt from this requirement (Section 19.20.060)	<ul style="list-style-type: none">• Tier II Elective: On-site renewable energy with documentation (Section A5.211.1)	<ul style="list-style-type: none">• EA Credit: Renewable Energy Production• SS Credit: Heat Island Reduction<ul style="list-style-type: none">○ Provide shade with structures covered by energy generation systems, such as solar thermal collectors, photovoltaics, and wind turbines

4. Construction Air Quality Management Plan

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• Projects shall provide a construction air quality management plan on the construction drawings that, at a minimum, includes protecting ducts during construction and changing the filters and vacuuming ducts prior to occupancy	<ul style="list-style-type: none">• Pollutant Control: Covering of duct openings and protection of mechanical equipment during construction (Section 5.504)	<ul style="list-style-type: none">• EQ Credit: Construction Indoor Air Quality Management Plan

5. Interior Paints & Wood Finishes

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Projects shall use interior paints and wood finishes with a low VOC levels that do not exceed 50 grams/L flat, or 150 grams per liter non-flat 	<ul style="list-style-type: none"> • Paints & Coatings: Low-VOC levels that do not exceed 50 grams/L flat, 100 grams/L non-flat, or 150 grams/L non-flat high gloss unless more stringent local codes apply • Wood Finishes: Shall meet ARB's ATCMCW reqs for formaldehyde; Non-exempt materials must meet Formaldehyde Limits (Table 5.504.4.5.) 	<ul style="list-style-type: none"> • EQ Credit: Low Emitting Materials <ul style="list-style-type: none"> ○ Option 1. Product Category Calculations (based on thresholds and emissions/content requirements) <ul style="list-style-type: none"> ➤ Interior paints, coatings, adhesives: at least 90%, by volume for emissions, 100% for VOC content ➤ Flooring, composite wood, ceilings, walls, insulation ○ Option 2. Budget Calculation Method (points for % compliance)

6. Energy Star Appliances

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• Appliances provided in residential and mixed-use projects, and commercial projects as appropriate, shall be Energy Star qualified appliances	<p>[Voluntary]</p> <p>Residential:</p> <ul style="list-style-type: none">• Install at least one qualified Energy Star dishwasher or clothes washer <p>Nonresidential:</p> <ul style="list-style-type: none">• Dishwashers shall meet Energy Star reqs	<ul style="list-style-type: none">• WE Prereq & Credit: Indoor Water Use Reduction• Residential – Energy Star dishwashers and clothes washers

7. Permeable Surfaces

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Storm drainage and stormwater runoff <ul style="list-style-type: none"> ○ Nat'l flood insurance program ○ Prevention of runoff ○ Runoff water quality ○ Non-permeable surfaces <ul style="list-style-type: none"> ➢ No more than 50% of ground-level spaces shall have non-permeable surfaces • Front Yard Paving <ul style="list-style-type: none"> ○ No more than 45% of the front yard setback shall be paved for walkways, driveways, and other hardcover pavement 	<p>[Voluntary]</p> <ul style="list-style-type: none"> • Nonresidential: Low-Impact Development (Section A5.106.3) • Residential: Water-permeable surfaces <ul style="list-style-type: none"> ○ Tier I – Not less than 20% permeable surfaces ○ Tier II – Not less than 30% permeable surfaces <p>(Section A4.106.4)</p>	<ul style="list-style-type: none"> • SS Credit: Rainwater Management <ul style="list-style-type: none"> ○ Option 1: Percentile of rainfall events <ul style="list-style-type: none"> ➢ Path 1 – 95th percentile ➢ Path 2 – 97th percentile ➢ Path 3 – 85th percentile (zero lot line projects only) ○ Option 2: Natural land cover conditions

8. Water Conservation

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Plant Materials (Section 19.26.060) <ul style="list-style-type: none"> ○ Drought tolerance <ul style="list-style-type: none"> ➢ Plant materials ➢ Turf limitations • Irrigation and Water Conservation (Section 19.26.070) <ul style="list-style-type: none"> ○ General standards for irrigation and conservation ○ Equipment • Water Conservation Plan (Chapter 15.52) 	<p>[Mandatory]</p> <ul style="list-style-type: none"> • Outdoor water use in landscape areas & rehabilitated landscape projects equal to or >500 sq ft. must apply MWEL0 or local landscape ordinance (Section 5.304.2/5.304.3) • Projects using greywater or rainwater collected on-site subject to MWEL0 Appendix D (Section 5.304.4) <p>[Elective]</p> <ul style="list-style-type: none"> • Outdoor potable water use (A5.303.2.3.4) • Restoration of areas disturbed by construction (A5.304.6) • Greywater irrigation systems (A5.304.8) • Nonpotable water systems (A5.305.1) • Irrigation systems (A5.305.2) 	<ul style="list-style-type: none"> • WE Credit: Outdoor Water Use Reduction <ul style="list-style-type: none"> ○ Option 1: No irrigation required ○ Option 2: Reduced irrigation • WE Credit: Indoor Water Use Reduction • WE Credit: Water Metering

9. Stormwater Diversion

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • City's Stormwater Ordinance • Storm drainage and Storm water runoff (Section 19.20.190) <ul style="list-style-type: none"> ○ Nat'l flood insurance program ○ Prevention of runoff ○ Runoff water quality ○ Non-permeable surfaces <ul style="list-style-type: none"> ➢ No more than 50% of ground-level spaces shall have non-permeable surfaces • Stormwater and urban runoff pollution control (Chapter 15.56) 	<p>[Mandatory]</p> <ul style="list-style-type: none"> • Grading & paving (Section 5.106.10) <p>[Elective]</p> <ul style="list-style-type: none"> • Stormwater design (Section A5.106.2) • Low impact development (Section A5.106.3) 	<ul style="list-style-type: none"> • SS Credit: Rainwater Management <ul style="list-style-type: none"> ○ Option 1: Percentile of rainfall events <ul style="list-style-type: none"> ➢ Path 1 – 95th percentile ➢ Path 2 – 97th percentile ➢ Path 3 – 85th percentile (zero lot line projects only) ○ Option 2: Natural land cover conditions

10. Alternative Transportation

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Bicycle Parking & Support Facilities (Section 19.28.150) <ul style="list-style-type: none"> ○ Number of spaces required <ul style="list-style-type: none"> ➢ Nonresidential: Provide 1 employee bike parking space per each 7,500 sq ft. gross floor area ➢ Residential: Provide 1 bike parking space per 4 units (For MFDs >4 units) ○ Design and devices ○ Signs ○ Surfacing ○ Interior parking spaces ○ Required shower and locker facilities 	<ul style="list-style-type: none"> • Short-term bicycle parking (Section 5.106.4.1.1) <ul style="list-style-type: none"> ○ Provide a minimum 1 2-bike capacity rack for each 5% of motor vehicle parking spaces • Long-term bicycle parking (Section 5.106.4.1.2) <ul style="list-style-type: none"> ○ Provide bicycle parking for 5% of each 10 parking spaces 	<ul style="list-style-type: none"> • LT Credit: Surrounding Density & Diverse Uses • LT Credit: Access to Quality Transit <ul style="list-style-type: none"> ○ Bicycle Storage and Shower Rooms ○ Bicycle Storage Location For All Projects

11. Water Saving Features

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Title 28, Plumbing Code of Los Angeles County (2017) 	<p>[Mandatory]</p> <ul style="list-style-type: none"> • Toilets shall not exceed 1.28 gpf • Urinals • Showerheads shall not exceed 2.0 gpm at 80 psi • Nonresidential lavatory faucets shall not exceed 0.5 gpm at 60 psi • Kitchen faucets and wash basins shall not exceed 1.8 gpm at 60 psi • Metering faucets shall not exceed 0.2 gal/cycle • Food waste disposers shall either modulate no more than 1 gpm when not in use or automatically turn off after <10 minutes of activity • Disposers shall use no more than 8 gpm of water <p>[Elective]</p> <ul style="list-style-type: none"> • Nonpotable water systems for indoor use • Appliances and fixtures for commercial application • Nonwater supplied urinals • Dual plumbing 	<ul style="list-style-type: none"> • WE Prereq: Indoor Water Use Reduction <ul style="list-style-type: none"> ○ All newly installed toilets, urinals, private lavatory faucets, and showerheads must be WaterSense labeled ○ Reduce fixture and fitting water use from the calculated baseline in WE Prereq Indoor Water Use Reduction (>20% reduction) ○ Cooling towers & evaporative condensers

12. Recyclable Materials Storage

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Solid Waste and Recyclable Materials Storage (Section 19.20.180) <ul style="list-style-type: none"> ○ Recycling Plan ○ MFD Projects <ul style="list-style-type: none"> ➤ Individual unit storage reqs ➤ Common storage reqs ○ Nonres structures and uses ○ Location reqs ○ Design and construction • Solid Waste Recycling (Section 19.36.280-B10) <ul style="list-style-type: none"> ○ Each project shall incorporate innovative designs, both interior and exterior, to make solid waste recycling more convenient and accessible to occupants 	<ul style="list-style-type: none"> • Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (Section 5.410.10) 	<ul style="list-style-type: none"> • MR Prereq: Storage and Collection of Recyclables <ul style="list-style-type: none"> ○ Includes paper, OCC, glass, plastics, metals, and E-waste

13. Energy Efficient Outdoor Lighting

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Outdoor lighting: Be energy-efficient and shielded so that all glare is confined within the boundaries of the site (Section 19.20.100 A3) 	<ul style="list-style-type: none"> • Outdoor Lighting Power Trade-Offs • Calculation of Actual & Allowed Lighting Power (Section 140.7) <ul style="list-style-type: none"> ○ Lighting Zone 3 <ul style="list-style-type: none"> ➢ Area Wattage Allow.: 0.040 W/ft³ ➢ Linear Wattage Allow.: 0.35 W/lf ➢ Initial Wattage Allow.: 520 W ➢ Extra reqs for parking lots & specific applications • Tier 2: <ul style="list-style-type: none"> ○ Energy Performance Outdoor Lighting Power 90% of Title 24, Pt 6 (Prereq A5.203.1.1.1.) ○ Energy Budget 90% or 85% of Title 24, Pt 6 calculated value of allowance (Prereq A5.203.1.2.2.) 	<ul style="list-style-type: none"> • EA Credit: Optimize Energy Performance <ul style="list-style-type: none"> ○ Option 2. Prescriptive Compliance: ASHRAE 50% Advanced Energy Design Guide • SS Credit: BUG method (backlight uplight glare)

14. Parking Landscaping for Surface Parking Areas

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Parking Lot Landscaping Performance Standards • Landscape Materials <ul style="list-style-type: none"> ○ Landscaping materials shall be provided throughout, using combi of trees, shrubs, and ground cover ○ Trees shall be in planters located throughout to reduce heat gain • Parking Lot Perimeter Landscaping <ul style="list-style-type: none"> ○ Plant materials shall provide a min. 36" height ○ Screening landscaping • Irrigation 	<ul style="list-style-type: none"> • Unspecific to surface parking areas – Outdoor Water Use (Section 5.304) • MWELO <ul style="list-style-type: none"> ○ Outdoor Water Use Landscape Areas of 2,500 sq ft or less may comply with MWELO performance reqs or prescriptive compliance measures (Section 5.304.4) <ul style="list-style-type: none"> ➢ Prescriptive compliance: 1) Landscape documentation package, 2) Incorporate compost & mulch, 3) Residential – 75% of plant area (exclud. edibles) use recycled water; Nonres – 100% of plant area (exclud. edibles) use recycled water, 4) Turf, 5) Irrigation ➢ Performance reqs: 1) Landscape documentation package, 2) Landscape design plan (incorporate compost & mulch), 3) Water Efficient Landscape Worksheet, 4) Irrigation 	<ul style="list-style-type: none"> • Unspecific to surface parking areas • WE Prereq: Outdoor Water Use Reduction <ul style="list-style-type: none"> ○ Option 1: No irrigation required – show the landscape does not require permanent irrigation beyond 2 years ○ Option 2: Reduced irrigation – reduce project’s landscape water req by min. 30% from calculated baseline through plant species selction and irrigation system efficiency

15. Transportation Demand Management

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Trip Reduction Goals • Requirements for Employers: <ul style="list-style-type: none"> ○ Submit a trip reduction plan as set forth in Section 10.16.080 ○ Employ best efforts to achieve an AVR of 1.5 as stated in Section 10.16.060 ○ Provide incentives to their employees to achieve an AVR of 1.5 ○ Submit annual progress report to the city (Chapter 10.16) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • LT Credit: Access to Quality Transit • Transportation Demand Management (ND) <ul style="list-style-type: none"> ○ Option 1: Transit Passes ○ Option 2: Developer-Sponsored Transit ○ Option 3: Vehicle Sharing ○ Option 4: Unbundling of Parking & Parking Fees ○ Option 5: Guaranteed Ride Home Program ○ Option 6: Flexible Work Arrangements

16. Construction Debris Control

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Property owner is required to provide a construction debris control plan <ul style="list-style-type: none"> ○ Construction debris includes liquid, cementitious, organic, or earth materials ○ The plan must establish a work area for trades requiring water to produce their work ○ Such area shall be dyked or excavated to prevent water borne debris from leaving the construction site; Products from such activity should be properly disposed of in accordance with all applicable laws prior to final approval of the building permit ○ These products include brick dust, concrete spoil, stucco spoil, and similar materials <p>(Section 13.04.040 Subsection 106.4.3.1 Added)</p>	<ul style="list-style-type: none"> • Storm water pollution prevention: Newly constructed projects and additions which disturb <1 acre of land shall prevent the pollution of stormwater runoff from the construction activities through: <ul style="list-style-type: none"> ○ Local ordinance ○ BMP (prevent soil erosion) <ul style="list-style-type: none"> ➢ Soil loss BMP ➢ Good housekeeping BMP to manage construction equipment, materials and wastes <p>(Section 5.106.1)</p>	<ul style="list-style-type: none"> • SS Prereq: Construction Activity Pollution Prevention

17. Environmental Protection, Pollution, and Solid Waste

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Solid Waste and Recyclables Collection <ul style="list-style-type: none"> ○ Mandatory Service (Section 15.28.010) <ul style="list-style-type: none"> ➤ Includes solid waste & recyclables from res & commercial/industrial ➤ Recycling mandatory for commercial/industrial, not multi-family res ○ Frequency of Collection (Section 15.28.20) ○ Containers for Solid Waste (Section 15.36.040) ○ Placement of Containers at Res Properties (Section 15.36.070) ○ Containers – Commercial & Industrial (Section 15.36.090) ○ Container Storage Areas – Multi res buildings should provide sufficient space for min. 2 recycling containers <p>(Chapter 15 – Article 2)</p>	<ul style="list-style-type: none"> • Recycling by occupants <ul style="list-style-type: none"> ○ Provide readily accessible, adequate areas for recycling, including at a minimum, paper, OCC, glass, plastics, organic waste, and metals ○ Meet local recycling ordinance, if more restrictive (Section 5.410) 	<ul style="list-style-type: none"> • MR Prereq: Storage and Collection of Recyclables <ul style="list-style-type: none"> ○ Includes paper, OCC, glass, plastics, metals, and E-waste

17. Environmental Protection, Pollution, and Solid Waste

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none"> • Environment <ul style="list-style-type: none"> ○ Water Conservation Plan ○ Water Conservation Landscaping ○ Storm Water and Urban Runoff Pollution Control ○ Green Building Requirements for Public Buildings <ul style="list-style-type: none"> ➤ All new public buildings or additions >10,000 sq ft. to public buildings shall achieve a min. LEED-certified level ➤ All other buildings receiving public funding from the City are strongly encouraged to achieve LEED-certified level <p>(Chapter 15 – Article 3)</p>	<ul style="list-style-type: none"> • Environmental Quality <ul style="list-style-type: none"> ○ Woodstoves, ventilation, adhesives/sealants, aerosol paints, quality carpet, composite wood products, resilient flooring, ozone depletion and GHG reductions, CFCs, Halons • Tier 2 Prereqs: <ul style="list-style-type: none"> ○ Resilient flooring systems w/ verification ○ Thermal insulation w/ verification of compliance <p>(Division 5.5)</p>	<ul style="list-style-type: none"> • LT Credit: Sensitive Land Protection • SS Prereq: Construction Activity Pollution Prevention • SS Credit: Site Development – Protect or Restore Habitat • SS Credit: Rainwater Management • MR Credit: Building Life-Cycle Impact Reduction • MR Credit: Building Product Disclosure & Optimization – <ul style="list-style-type: none"> ○ Environmental Product Declarations ○ Sourcing of Raw Materials ○ Material Ingredients

18. Energy Efficiency

West Hollywood Green Building Code	CALGreen	LEED
<ul style="list-style-type: none">• CA Title 24, Pt 6• West Hollywood Building, Electrical, Mechanical, and Plumbing Codes	<ul style="list-style-type: none">• CA Title 24, Pt 6: 2016 Building Energy Efficiency Standards	<ul style="list-style-type: none">• EA Credit: Optimize Energy Performance• EA Credit: Advanced Energy Metering• EA Credit: Demand Response• EA Credit: Renewable Energy Production• EA Credit: Green Power and Carbon Offsets

Case Studies

Park City, UT



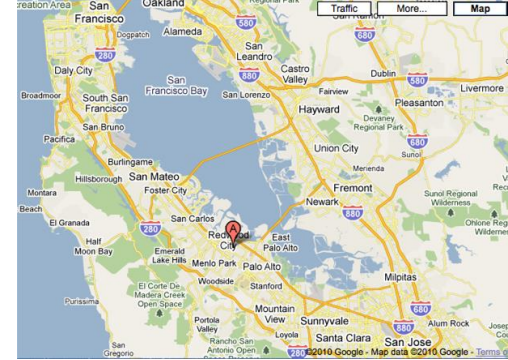
- Park City, UT has been tracking community-wide carbon 2007
- Climate Action Plan = Save Our Snow Action Plan, 2010
 - Required all NC be 20% more efficient than 2005 code
 - 25% renewable energy by 2020
- NZE Code, October 2017
- NZE performance reqs for all municipal buildings and facilities, 100% renewable electricity for city operations by 2022, whole community by 2032
- Main components:
 - Water surcharge & energy efficiency projects
 - NZE buildings & facilities
 - 100% renewable (electrification/ decarbonization)
 - EV buses, passenger vehicles, e-bikes, etc.
 - Employee commute (health insurance incentives, UDOT vanpool, increased transit, paid parking)
 - Carbon sink (tree planting, management plans)
- ✓ *Verification strategies: Living Building Challenge's Energy Petal Certification, zEPI score of 0, Passive House Certification with on-site renewables*

Cambridge, MA



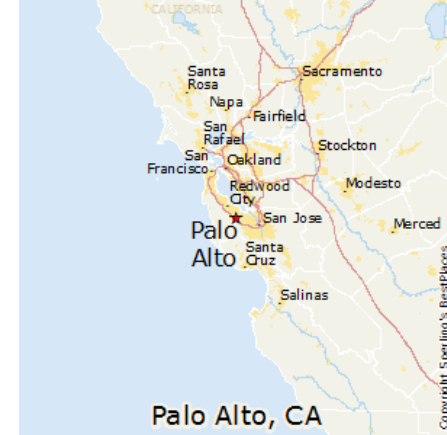
- Green Building Zoning Amendment 2010 (Article 22 of the Zoning Ordinance, Sustainable Design and Development), amended in 2016
- Main components:
 - Provisions only apply to projects 25,000+ sq ft.
 - Projects greater than 25,000 sq ft., but less than 50,000 sq ft. required to meet reqs of LEED 'Certified' level
 - Projects >50,000 sq ft. required to meet reqs of LEED 'Silver' or better
 - Green roofs
 - Exterior walls & insulation
 - Overhangs & sun-shading devices
 - Solar energy systems
 - Wind turbine systems
 - Requires commercial buildings meet energy performance standards of ASHRAE 2013 + amended Stretch Energy Code requires additional 10% of stringency for buildings over 100,000 sq ft. → 17% more stringency than ASHRAE 2010
 - New buildings asked to present decarbonization pathway plan with application
- Net Zero 25-Year Action Plan, 2013
 - 'Net zero ready' requirement for NC municipal buildings
 - City is exploring incentives such as green building bonds and adjusting pricing of permit fees (or rebates) based on performance
- City has made commitment to achieve carbon neutrality by 2050

Menlo Park, CA

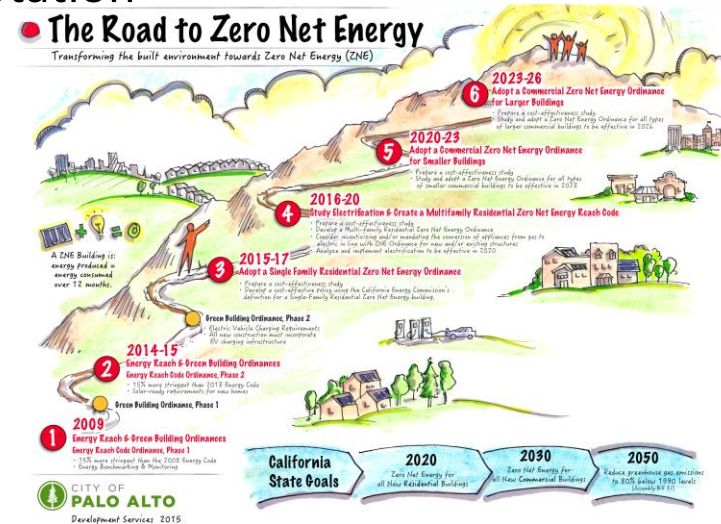


- Climate Action Plan 2009, updated in 2015
- Ordinance no. 1024, November 2016
- Main components:
 - NC must meet 100% of energy demand through any combination of the following:
 - a) On-site generation, b) Purchase of 100% RE, c) Purchase & installation of local RE within the City, d) Purchase certified RE credits and/or certified RE off-sets annually
 - NC must be designed to meet LEED Silver or Gold
 - EV Chargers
 - Energy Reporting (EPA Energy Star Portfolio Manager)
 - Water use efficiency and recycled water
 - All NC must be built and maintained without use of well water
 - All NC shall be dual plumbed for the internal use of recycled water
 - Zero waste management
 - Transportation demand management plans required of buildings >25,000 sq ft.
 - Includes CalTrans Go Pass for city staff
 - Hazard mitigation and sea level rise resiliency
 - Bird-friendly design
- MenloSpark – nonprofit collaboration towards climate neutrality by 2025

Palo Alto, CA



- Sustainability & Climate Action Plan, 2016
 - Goal of achieving 80% GHGE reduction below 1990 levels by 2030
 - Next phase of the plan (18/19): decarbonization, electrification, mobility, water conservation, climate adaptation
- Palo Alto Green Municipal Code 16.14
 - Based on CalGreen + GreenPoint
- ZNE Roadmap



✓ Verification Strategies (Administrative):

- Green Building Incremental Verification
 - CalGreen Tier 1 and Tier 2 projects must submit monthly reports to their Green Building Special Inspector throughout construction + City Inspector site inspection
 - Green Building Final Inspection by Green Building Special Inspector

Mountain View, CA



- Climate Protection Roadmap, 2015
 - Identifies strategies to reduce GHGE 80% by 2050
- Environmental Sustainability Action Plan 3 ('16-'19)
 - Purchase 100% renewable energy for City operations
 - Adopt LEED Gold as min. standard for NC City facilities and renovations >10,000 sq ft.
 - Create TDM
 - Amend zoning ordinance to exempt specific green building improvements from requiring a planning permit
- Mountain View Green Building Code
 - Projects required to “meet the intent” of a third-party rating system
 - CalGreen + Title 24, Pt 6
 - NC Res >5 units = CalGreen/Title 24, pt 6 + “intent” of 70 GreenPoint Rated points
 - NC Nonres 5,000 -25,000 sq ft. = CalGreen/Title 24, pt 6 + “intent” of LEED ‘Certified’
 - NC Nonres >25,000 sq ft. = CalGreen/Title 24, pt 6 + “intent” of LEED ‘Silver’

Findings

- ✓ West Hollywood's existing Green Building Program, policies, and plans create a substantial baseline – there's a lot in place already
- ✓ Other cities of similar size are focusing on energy and GHG reduction as much as green issues
- ✓ New rating systems are raising the bar

Discussion

- How can the updated ordinance continue to demonstrate leadership?
- Are there specific design strategies, technologies, or standards that should be addressed?
- What is the potential to fold in emerging topics, including resilience and well-being?
- What type of development should we be planning for in the future?