Palo Alto's New and Improved Green Building Ordinance - How, What and Where!

BayREN November Forum

Local Government Resources for Energy Efficiency

November 18th, 2014
Overview

- City of Palo Alto’s green building timeline
- New program structure
- Challenges and opportunities
- Future vision and next steps
- Questions
Green Building Program Timeline
City of Palo Alto

2007
Green Building Ordinance in Palo Alto with 2008 Energy Reach Code of 15%

2009
Green Building Ordinance adopted in 2010 Calgreen Tier 1, 2 & Green Point Rated, kept 2008 Energy Reach Code of 15%

2013
Green Building Ordinance adopted in 2013 includes Calgreen Tier 1, 2 & Green Point Rated
EVSE-Ready Ordinance for New Single-Family Residential

2014
EVSE-Ready Ordinance for Multi-Family & Nonresidential
Preparing for future updates to the Green Building Ordinance & New Energy Reach Code
New Program Structure

1. Green Building Advisory Group
   - Provides guidance to staff on green building policy

2. Green Building Technical Committee
   - Staff members tasked with drafting policy

3. Green Building Coordinator
   - Internal coordinator with Green Building Liaisons
   - Green Building coordination within the Planning, Building, Inspections, and Utilities departments
   - Develops and administers internal quality control procedures
Green Building Program Steps

1. Audit of existing green building program
   - Presented opportunities for improvement and reorganization

2. Green Building Advisory Retreat
   - Retreat held to define the direction of the program

2. Green Building Tasks Delegated
   - Staff members tasked with taking on green requirements related to their job

3. Green Building Quality Control
   - Internal green building coordinator defines procedures and trainings staff, and the public on implementation
Program Operational Goals

Fundamental Concept: Green Building Paths

Applicant determines Green Building Path & Development Services enforces (Green Building Path Checklists)
General Green Building Permit Process

**Planning/Entitlement**
- Informing applicant of GB Requirement
- Collecting preliminary information.

**Permitting**
- Confirming GB Req’s in contract documents
  - PLAN CHECKER

**Construction**
- Checking GB Performance requirements on site
  - INSPECTOR

**Performance Period**
- Confirming GB Req’s in contract documents
  - PLAN CHECKER

**Utility Monitoring**
- Syncing Design performance data with actual data
  - UTILITIES

**Occupancy**
- Monitoring Utility performance data in Portfolio Manager
  - UTILITIES
Green Building Advisory Retreat

- Focus
  - Create “leadership scale” on how aggressive we want to be on site, energy, water, materials, IAQ
  - Developed clear performance requirements for the upcoming revisions of green building ordinance

**Leadership Scale**

| Maintain Current Leadership | Increased Leadership | Aggressive Leadership |

**By when:**

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<td>Set Zero Net Energy goal sooner than 2020 for large residential (pending decision on ZNE definition)</td>
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<td>Move towards fuel-switching (from gas to electricity)</td>
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<td>Site Planning &amp; Design</td>
<td>Raise awareness &amp; consider requirements for bird-friendly design</td>
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<td>Mandate use of captured rainwater for specific circumstances</td>
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Policy Direction Decisions

Group decisions captured during retreat.
Green Building Vision

A Green, Sustainable Built Environment in Palo Alto

- Meet today's needs
- Not compromise the needs of future generations

High Quality Design that Measurably Increases Performance

- Energy
- Emissions
- Materials & Waste
- Water Efficiency
- Indoor Air Quality

Excellence in design
Innovation in construction
Creative approaches to development

POLICIES & PROGRAMS

- GOALS
  - Promote energy, water & resource conservation
  - Eliminate emissions & solid waste generation

- Green Building Ordinance

CHALLENGES & LIMITATIONS

- Cost
- Flexibility
- Buildability
- Functionality
Challenges and Opportunities

- Cost-effectiveness Study Report consultant.
- Stringency of 2013 energy code – Reach Code needs to be feasible and cost effective.
- Gaining consensus on the future of the program
- Setting Priorities
Green Building Policy Goals Timeline
City of Palo Alto

Code Cycle Adoption Years

2014 2015 2016 2017 2019 2022 2025 2028 2031 2050

Current Activities:
- Adopt Green Building Ordinance w/ 2013 Energy Reach Code with
- Enhanced Solar Readiness
- Lowered threshold for Commissioning requirements

2016 ZNE Goal City of Palo Alto – Enforce ZNE for Larger Dwellings effective 1/1/17
2020 ZNE Goal CEC Residential AB32 (GHG =1990 Levels)
2025 ZNE Goal City of Palo Alto Enforce ZNE for Some Commercial Buildings
2030 ZNE CEC Goal Non-Residential AB32 (GHG =42% of 2005 Levels)
2050 AB32 (GHG = 80% 1990 Levels)
Questions?

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