Overview of ZNE City Policies

Summary of Existing ZNE Policies in California

November 16, 2016
Range of City ZNE Policies

- Building codes and ordinances (6)
- ZNE Energy or Community Plans (4)
- Mandatory solar policies (13)
- Lease language (3)
- Incentive programs (3)
- RFP language for ZNE (2)
City of Santa Monica

- All new single-family homes, duplexes and low-rise multi-family dwellings
- 15% above Title 24 2017
- Achieve Energy Design Rating (EDR) of zero
  - “zero out” TDV energy use
**Policy Focus - Mandatory Solar Ordinances**

**Culver City**
- 1KW of solar per 10K sf for applicable projects
- New construction, additions, or major renovations over 10K sf
- Does not apply to 1-2 family structures, garages, or parking structures

**Lancaster**
- 0.5 kW to 1.5 kW depending on building type

**San Francisco**
- New construction <10 floors must install solar panels or solar water heaters on top of new buildings, both residential and commercial
- Minimum size system for all new (1 kW to 5 kW depending on building type) or alternative solar hot water system
- Mandatory cool roofs for low-sloped commercial and multifamily of >0.70

**San Mateo**
Policy Focus - Mandatory Solar Ordinances

Sebastopol

Install 2 watts per square foot of conditioned building area including existing, remodeled and new conditioned space

OR

Use modeling software to demonstrate that the system installed will meet 75% of the building's annual electricity load
Incentives (financial or alternative)

**PACE financing**
- Solar/distributed renewables
- Energy efficiency measures

**Solar rebates and incentives**
- City-funded (SF, Marin)
- Utility-funded (LA, Pasadena, Plumas-Sierra)

**ZNE-specific**
- NYC: $2-8K per unit under three performance tiers, the highest being for ZNE homes
- City of Watsonville: New Climate Impact Fee enacted, fully refunded for ZNE

**PV Buydown Programs**
- Anaheim, Truckee, Ukiah, etc.
- Bay Area Sunshares
Non-financial incentives

City of Irvine: No-fee solar permits

San Diego: Expedited permits

Culver City: Plan check and permit fees (not to exceed $5K) waived for energy efficiency improvements in specific areas
**Example RFP Language**

**Utility RFP**
Prepare a list of proposed design measures for the building to achieve a very low energy footprint in the range of at least 16-22 kBtu/sf, or less, along with supporting documentation and analysis.

**Community College District RFP**
“This project shall be built in a manner that maximizes all possible sustainable attributes including, but not limited to, state-of-the-art building design, mechanical design, and material selection, and building integrated renewable energy generation systems to achieve zero-energy consumption and a carbon-neutral profile upon completion.”
Looking Ahead

Initial Step:

- Compile relevant ZNE policy and ordinance examples

Gap Analysis and Opportunities:

- New ZNE resources for Bay Area cities

Template Language and Policies:

- Refine and compile ZNE policy resources