

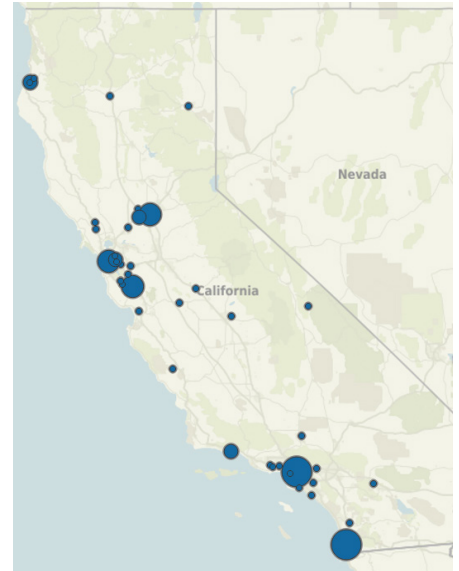
# California ZNE Watchlist



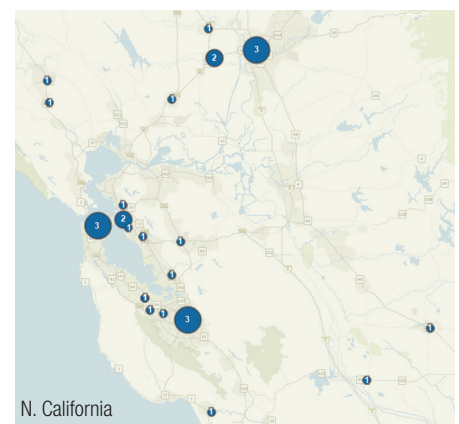
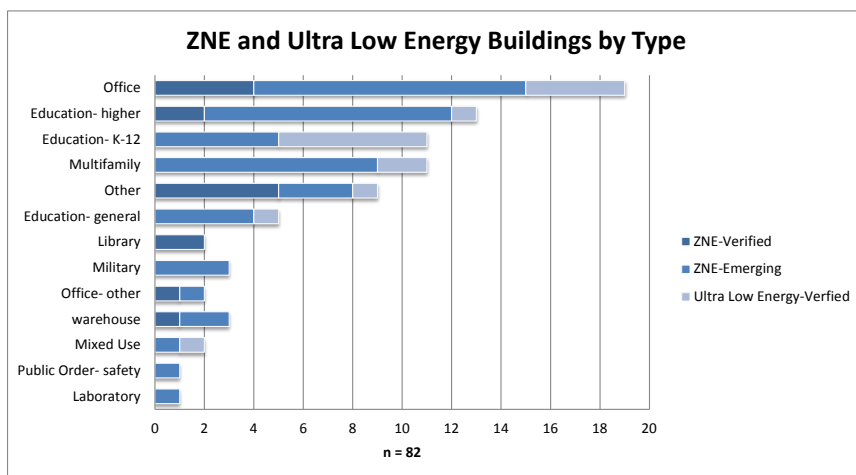
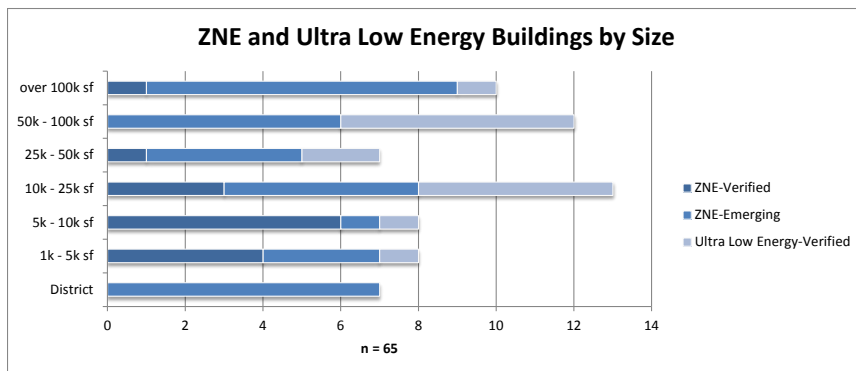
California leads the country in both policy and projects that are laying the path to a zero net energy (ZNE) future. California state agencies have adopted goals for 100% of new and 50% of existing commercial buildings to be ZNE by 2030. Leading design firms and owners have already recognized the real estate and occupancy advantages of these high performance buildings and today California has 66 commercial buildings either verified (15) as ZNE or emerging (51) toward that target.

This CA ZNE Watchlist tracks commercial buildings (including multi-family) based on information gathered by New Buildings Institute (NBI) from multiple sources including designers, owners, utility programs, private and public organizations, articles, e-news, research, and commercial real estate professionals. It serves, along with other available ZNE resources<sup>1</sup>, to support the awareness, acceptance and adoption of ZNE goals and outcomes throughout California and the nation. Buildings with ultra-low energy performance comparable to ZNE are also included.

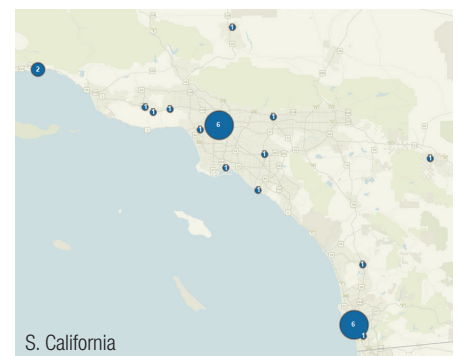
The graphics below show the trends in location, type and size of the ZNE buildings in California.



Locations of CA ZNE Verified and Emerging ZNE Building. Dot size represents volume of buildings.



N. California



S. California

<sup>1</sup> For more resources: CPUC (<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Zero+Net+Energy+Buildings.htm>) and NBI ([www.newbuildings.org/zero-energy](http://www.newbuildings.org/zero-energy))

# List of Zero Energy & Ultra-Low Energy Buildings in California

This ZNE Watchlist provides examples of commercial buildings that have verified zero net energy (ZNE) performance, are emerging toward a ZNE goal or reflect comparable ultra-low energy performance. These are defined as:

- **ZNE Verified** buildings (or districts) have been documented to have met, over the course of a year, all net energy use through onsite renewables. The energy use of all fuels (electric, natural gas, steam, etc.) is counted and offset by production from onsite renewables.
- **ZNE Emerging** buildings (or districts) have a publically stated goal of ZNE but do not yet meet the definition of ZNE verified. These may be in the planning or design phase, under construction or have been in operation for less than a year. Others may have been operating for 12 months or longer, but their measured energy has either yet to achieve net zero or the measured data to document ZNE verified status was not available.
- **Ultra-low Energy Verified** buildings have 12 or more months of metered data that documents energy performance comparable to ZNE buildings (typically 60-80% better than the national industry average). They expand the set of building examples with design strategies and technologies that have resulted in ultra-low energy use. They may have limited renewable resources onsite but do not have a known stated goal of ZNE.

There are, undoubtedly, other projects that belong on this list and/or corrections and updates to this directory. Provide information or add new projects through the NBI Registry located at: <http://newbuildings.org/share> or email us at [info@newbuildings.org](mailto:info@newbuildings.org).

Building Name	Year Completed	Location	Building Type	Size SF	Total EUI	Site RPI	Net EUI
<b>Verified ZNE</b>							
Audubon Center at Debs Park	2003	E Los Angeles	Other	5,020	17.1	17.1	0.0
Bacon St. Offices	2009	San Diego	Office	4,500	12.7	22.2	-9.5
Challengers Tennis Club	2002	Los Angeles	Other	3,500	9.0	9.0	0.0
David and Lucile Packard Foundation	2012	Los Altos	Office	49,161	24.4	29.0	-4.6
Diamond X Ranch Student Intern Center-Malibu	2011	Calabasas	Other	3,500	31.5	35.1	-3.6
DPR Construction San Diego Net Zero Office	2010	San Diego	Office	24,000	14.8	17.1	-2.4
Environmental Nature Center	2008	Newport Beach	Other	8,535	17.6	27.7	-10.1
Environmental Tech. Center Sonoma State	2001	Rohnert Park	Education- higher	2,200	2.3	3.8	-1.5
IDEAs Z2 Design Facility	2007	San Jose	Office	6,557	22.6	23.2	-0.6
Jess Jackson Sustainable Winery Building	2014	Davis	Warehouse	8,500	1.4	2.7	-1.3
Leslie Shao-Ming Sun Field Station	2002	Woodside	Education- higher	13,200	3.4	6.5	-3.1
Sacred Heart Schools Stevens Family Library	2012	Atherton	Library	6,300	16.9	29.1	-12.2
Vacaville Transportation Center	2011	Vacaville	Other	261,360	0.1	0.2	-0.1
Watsonville Water Resources Center	2009	Watsonville	Office- other	16,000	51.4	117.8	-66.4
West Berkeley Public Library	2013	Berkeley	Library	9,399	24.7	27.6	-2.9

**Energy Use Intensity (EUI)** is the (total or net) building use of site energy in kBtus/sf/yr. Buildings that have been verified as ZNE have either a zero net building EUI or a negative net building EUI meaning the renewable production exceeded the energy use.

**Renewable Production Intensity (RPI)** is the energy generation onsite per year in kBtus/sf/yr. This term was created by NBI for use in this context.



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Building Name	Year Completed	Location	Building Type	Size SF	Total EUI	Site RPI	Net EUI
<b>ZNE Emerging Buildings</b>							
435 Indio	2013	Sunnyvale	Office	31,800	23.9		
Aquarium of the Pacific Watershed Addition	2008	Long Beach	Education- general	2,500			
Aster Place	2012	Eureka	Multifamily	NA			
Bagatelos Architectural Glass Solutions (M)	2008	Sacramento	warehouse	63,000	10.4	8.1	2.3
BEST Center at Laney College	under construction	Oakland	Education- higher	District			
Blackford School Multi-Use Building	2013	San Jose	Education- K-12	NA			
California Department of Motor Vehicles		Various	office	NA			
California DOT SFOBB Phase 2 Warehouse		San Francisco	warehouse	NA			
Camp Parks		Dublin	Military	District			
Church Hill Townhomes	2013	Fortuna	Multifamily	NA			
College of the Desert West Valley Campus - Phase 1	2013	Palm Springs	Education- higher	NA			
Conrad N. Hilton Foundation	2012	Agoura Hills	Office	22,240			
DPR San Francisco Office	2014	San Francisco	Office	24,000			
Exploratorium	2013	San Francisco	Other	330,000	50.1	36.7	13.4
Family Pet Hospital	2014	Clovis	Other	NA			
Forest Service's Technology & Development Ctr	2013	San Dimas	Office- other	NA			
Fort Hunter Liggett	under construction	Jolon	Military	District			
George V Leyva Middle School Admin Bldg - San Jose	2011	San Jose	Office	9,200			
Hanover Page Mill Building		Palo Alto	Office	89,584	24		
IBEW Local 595 Zero Net Energy Center	2013	San Leandro	Education- general	45,001	11	6	5
Kaiser Permanente Antelope Valley Specialty Medical Office Building	2014	Lancaster	Office	136,800			
La Escuelita Education Center	2014	Oakland	Education- K-12	NA			
La Valentina North	2012	Sacramento	Multifamily	19,875	31	6	25
Los Angeles Harbor College Sciences Complex	2013	Los Angeles	Education- higher	73,767			
Los Guilicos Correctional Facility	2013	Santa Rosa	Public Order- safety	149,000			
LPL Finacial Center at La Jolla Commons	2014	San Diego	Office	415,000			
Morphosis Architecture Studio (M)	2012	Culver City	Office	11,600			9.8
Mutual Housing at Spring Lake	2015	Woodland	Multifamily	NA			
Net Zero Plus Electrical Training Institute	2015	Los Angeles	Education- general	142,000			
Oak Park High School	2014	Oak Park	Education- K-12	960			
Ohlone Campus Core Replacement Project	2015	Fremont	Education- higher	NA			
Pierce College Maintenance & Operations Facility and Net-Zero Central Plant	2011	Los Angeles	Other	42,000			
Plaza Point	2012	Arcata	Multifamily	NA			
Redding School for the Arts (M)	2011	Redding	Education- K-12	77,091	16	8	8
Rio Vista	2015	San Ysidro	Multifamily	NA			

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Building Name	Year Completed	Location	Building Type	Size SF	Total EUI	Site RPI	Net EUI
Rohner Village	2013	Fortuna	Multifamily	NA			
San Luis National Wildlife Refuge Complex Headquarters and Visitor Center	2012	Los Banos	Education- general	17,000	6	6	0
Sierra Army Depot		Herlong	Military	District			
Sierra Nevada Aquatic Research Lab Multiuse Classrom and Lecture Hall	2015	Mammoth Lakes	Education- higher	2,696			
SMUD Net Zero Campus - East Campus- Operations Center	2013	Scaramento	Office	350,000			
Solana Ranch Elementary School	2014	San Diego	Education- K-12	68,000			
Solterra EcoLuxury Apartments	2013	San Diego	Multifamily	NA			
Sonoma Court	2014	Escondido	Multifamily	NA			
Student Services Center at Mesa College	2012	San Diego	Education- higher	85,000			
Student Success and Retention Center at East Los Angeles College	2014	Los Angeles	Education- higher	136,000			
UC Davis West Village (eco district)	2012	Davis	Mixed Use	District			
UC Merced	2020	Merced	Education- higher	District			
UC San Diego J Craig Venter Institute	2013	La Jolla	Laboratory	45,000	50		
UC Santa Barbara Recreation Center	under construction	Santa Barbara	Education- higher	NA			
UC Santa Barbara Student Services Buildings		Santa Barbara	Education- higher	District			
VF Outdoor HQ	2013	Alameda	Office	160,000			

<b>Ultra Low Energy Verified Buildings</b>							
355 11th Street: The Matarozzi/Pelsinger Multi-Use Building	2010	San Francisco	Mixed Use	14,000	10	9	1
Aventine	2008	La Jolla	Office	253,000	23	0	23
Carlton Hills Modernization	2008	Santee	Education- K-12	56,159	26.0	0.0	26.0
Carlton Oaks Modernization	2008	Santee	Education- K-12	61,675	24.0	0.0	24.0
Center for Children & Families-CSU San Marcos	2007	San Marcos	Education- general	20,200	28.0	0.0	28.0
Claiborne & Churchill Winery	1996	San Luis Obispo	Office	2,585	20.0	0.0	20.0
Colorado Court Affordable Housing	2002	Santa Monica	Multifamily	29,900	38.8	2.4	36.4
Georgina Blach Intermediate School	2002	Los Altos	Education- K-12	71,741	33	0	33
High Tech High - Chula Vista	2009	Chula Vista	Education- K-12	44,370	40.3	14.2	26.1
Jane D'Aza House of Formation	2005	San Rafael	Other	6,200	7.0	0.0	7.0
Kirsch Center For Environmental Studies at De Anza College	2005	Los Altos	Education- higher	21,600	33	10	23
Los Vecinos - Multifamily	2009	Chula Vista	Multifamily	51,000	19.2	9.0	10.2
Navy Building 850		Port Hueneme	Office	17,000	25	11	15
Ridgehaven Office Building	1995	San Diego	Office	78,000	24	0	24
Sycamore Canyon Modernization	2008	Santee	Education- K-12	52,000	23.0	0.0	23.0
Westmont High School Science Education Facility	2004	Campbell	Education- K-12	12,362	18.9	0.0	18.9

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