# 2015 List of Zero Energy Buildings

In 2011 and 2013 NBI conducted research to identify buildings with targets or actual outcomes of net zero energy. These results were published in 'ZNE Status Reports' by NBI in early 2012 and 2014. NBI continues to track and document buildings with low and zero energy to support the market and policy interest in this data. This 2015 list of buildings is an interim count based on this ongoing work.

Verified Zero Energy Buildings (or Districts) are those with greatly reduced energy loads that have been documented to have met, over the course of a year, all net energy use through onsite renewable sources of energy. The energy use of all fuels (electric, natural gas, steam, etc.) is counted and offset. *Buildings new to the list are in bold italics.* 

### Verified Zero Energy Buildings

Year Completed	Name	Location	State	Building Type	Size (sf)	Total Building Actual EUI	Site Renewable EUI	Net Building EUI*
2000	Oberlin College Lewis Center	Oberlin	OH	Education- higher	13,600	32	36	-4
2001	Environmental Technology Center Sonoma State	Rohnert Park	CA	Education- higher	2,200	3	4	-1
	Challengers Tennis Club	Los Angeles	CA	Other	3,500	9	9	0
2002	Leslie Shao-Ming Sun Field Station	Woodside	CA	Education- higher	13,200	4	6	-2
Completed 2000 2001	Audubon Center at Debs Park	E Los Angeles	CA	Other	5,020	17	17	0
	Science House	St. Paul	MN	Other	1,532	18	18	0
2005	Hawaii Gateway Energy Center	Kailua-Kona	HI	Other	5,600	28	31	-3
2007	Aldo Leopold Legacy Center	Baraboo	WI	Office	11,884	16	18	-2
2007	IDeAs Z2 Design Facility <sup>L</sup>	San Jose	CA	Office <sup>R</sup>	6,557	21	25	-4
	Camden Friends Meeting Social Hall	Camden	DE	Public Assembly	2,864	18	20	-2
2008	Environmental Nature Center	Newport Beach	CA	Other	8,535	18	28	-10
	Hudson Valley Clean Energy Headquarters	Rhinebeck	NY	Other	5,470	13	13	0
	Bacon Street Offices	San Diego	CA	Office <sup>R</sup>	4,500	13	22	-9
	Chrisney Library	Chrisney	IN	Library	2,400	15	18	-3
2009	Living Learning Center at Tyson Research Center <sup>L</sup>	Eureka	MO	Education- higher	2,968	24	24	0
2003 2005 2007 2008 2008	Omega Center for Sustainable Living <sup>L</sup>	Rhinebeck	NY	Laboratory	6,200	13	21	-8
	Pringle Creek Painter's Hall L	Salem	OR	Public Assembly <sup>R</sup>	3,600	21	21	0

R - Indicates a building renovation project

L - Building is ZNE certified by the International Living Future Institute

\*The Net Energy Use Intensity (EUI) includes both whole-building measured energy usage and on-site renewable generation. Buildings will have an EUI of zero or less, with a negative number indicating generation exceeds use.

Year Completed	Name	Location	State	Building Type	Size (sf)	Total Building Actual EUI	Site Renewable EUI	Net Building EVI*
	Putney Field House	Putney	VT	Education- K-12	16,800	10	10	0
2009	Watsonville Water Resources Center	Watsonville	CA	Office - Other	16,000	51	18	-66
	Dovetail Construction Headquarters Barn	Richmond	VA	Office <sup>R</sup>	6,800	UA	UA	0
	DPR Construction San Diego Net Zero Office	San Diego	CA	Office <sup>R</sup>	24,000	15	17	-2
Completed 2009 2010 2011 2012	Energy Lab at Hawaii Preparatory Academy <sup>L</sup>	Kamuela	HI	Education- K-12	5,902	11	11	0
	Hood River Middle School Net-Zero Addition	Hood River	OR	Education- K-12	5,331	27	27	0
	NREL Research Support Facility	Golden	CO	Office	222,000	33	33	0
	Richardsville Elementary School	Bowling Green	KY	Education- K-12	72,285	18	18	0
	Anna Maria Historic Green Village	Anna Maria	FL	Mixed Use <sup>R</sup>	District	28	35	-7
	Bertschi School Science Wing L	Seattle	WA	Education- K-12	1,425	48	48	0
	Locust Trace AgriScience High School Campus	Lexington	KY	Education- K-12	70,000	10	11	-1
2011	TD Bank Branch - Ft. Lauderdale	Fort Lauderdale	FL	Other	3,970	92	96	-4
	Vacaville Transportation Center	Vacaville	CA	Other	261,360	0.1	0.2	-0.1
	ZHome - Issaquah L	Issaquah	WA	Multifamily	5,813	21	22	-1
	Diamond X Ranch Student Intern Center-Malibu	Calabasas	CA	Other	3,500	32	35	-4
	David and Lucile Packard Foundation	Los Altos	CA	Office	49,161	24	28	-4
	DPR Construction Phoenix Regional Office <sup>L</sup>	Phoenix	AZ	Office <sup>R</sup>	16,533	27	30	-3
2012	Leon County Cooperative Extension	Tallahassee	FL	Office <sup>R</sup>	13,000	19	19	0
	Bullitt Foundation Cascadia Center for Sustainable Design and Construction <sup>1</sup>	Seattle	WA	Office	52,000	10	17	-4
	Sacred Heart Schools Stevens Family Library <sup>L</sup>	Atherton	CA	Library	6,300	17	29	-12
2012	Sandy Grove Middle School	Lumber Bridge	NC	Education- K-12	74,000	21	27	-7
2013	West Berkeley Public Library	Berkeley	CA	Library	9,300	22	23	-2

#### **Verified Buildings Total=39**

*Note:* District in the size category indicates sets of buildings with a common geographical location that are working toward, or have accomplished, net zero and includes communities, campuses, neighborhoods and/or districts.

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**Emerging Zero Energy Buildings** (or Districts) have a publically stated goal of ZNE but do not yet meet the definition of ZNE verified. These may be in planning, design, 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 for this study. **Buildings new to the list are in bold italics.** 

#### **Emerging Zero Energy Buildings**

Project Completion	Name	Location	State	Building Type	Size (sf)
2005	Melink Corporation Headquarters	Milford	OH	Office	30,000
2007	Prairie Hill Learning Center	Roca	NE	Education- general	2,940
	Aquarium of the Pacific Watershed Addition	Long Beach	CA	Education- general	2,500
2008	Bagatelos Architectural Glass Solutions	Sacramento	СА	Warehouse	63,000
	Mills River Elementary School	Mills River	NC	Education- K-12	80,820
	da Vinci School High Performance Classroom	Portland	OR	Education- K-12	1,485
2009	Hillandale Elementary School	East Flat Rock	NC	Education- K-12	80,820
	Oak Ridge National Lab Office Building 3156	Oak Ridge	TN	Office	6,900
	Bagley Classroom University of Minnesota Duluth	Duluth	MN	Education- higher	2,000
	Center for Energy Efficient Design	Rocky Mount	VA	Education- K-12	3,600
	Evie Garrett Dennis E12 Campus (Denver Schools)	Denver	CO	Education- K-12	186,468
2010	Harmony House for Cats	Chicago	IL	Other	7,095
	Lowell Trial Court	Lowell	MA	Other	245,000
	Magnify Credit Union	Lakeland	FL	Retail	4,151
	New Century Elementary School	Fayetteville	NC	Education- K-12	109,758
	Palmetto Bay Municipal Center	Palmetto Bay	FL	Office	25,000
	Turkey Foot Middle School	Edgewood	KY	Education- K-12	133,000
	Centennial PK-12 School	Denver	CO	Education- K-12	64,000
	Centre for Interactive Research on Sustainability (CIRS)	Vancouver	Canada	Education- general	76,223
2011	Coastal Maine Botanical Gardens Bosarge Family Education Center	Boothbay	ME	Education- general	8,200
2011	Desert Research Institute Renewable Energy Experimental Facility	Reno	NV	Other	1,400
	EcoFlats Building	Portland	OR	Multifamily	19,860
	Frito-Lay Casa Grande Snack Factory	Casa Grande	AZ	Other	188,000
	George V. Leyva Middle School Admin Building	San Jose	CA	Office	9,200

Project Completion	Name	Location	State	Building Type	Size (sf)
	Glenn York Elementary School	Pearland	TX	Education- K-12	Unknown
	June Key Delta Community Center	Portland	OR	Public Assembly	2,700
	McCormick Spice Net Zero Warehouse	Belcamp	MD	Warehouse	369,000
	NASA Propellants Facility at Kennedy Space Center	Kennedy Space Center	FL	Office- other	9,540
	Pierce College Maintenance & Operations Facility and Net-Zero Central Plant	Los Angeles	CA	Other	42,000
2011	Portland Community College Newberg Center	Newberg	OR	Education - higher	13,000
	Redding School for the Arts	Redding	CA	Education - K-12	77,091
	Rice Fergus Miller Office & Studio	Bremerton	WA	Office	39,000
	Sangre de Cristo PK-12 School	Mosca	CO	Education - K-12	8,000
	VanDusen Botanical Garden Visitor Centre	Vancouver	Canada	Public Assembly	19,000
	West Irving Library	Irving	ТΧ	Library	25,876
	Wilson Air Center - Chattanooga Airport - West Side Aviation Development -	Chattanooga	TN	Education- K-12 Public Assembly Warehouse Office- other Other Education - higher Education - K-12 Office Education - K-12 Public Assembly	9,015
	Abondance - Montreal Multi-Family Net Zero	Montreal	Canada	Multifamily	3,048
	Colonel Smith Middle School	Fort Huachuca	AZ	Education - K-12	88,693
	Conrad N. Hilton Foundation	Agoura Hills	CA	Office	22,240
	Franklin Regional Transit Center	Greenfield	MA	Other	24,000
	Georgia Peanut Commission HQ	Tifton	GA	Office	Unknown
	Lady Bird Johnson Middle School	Irving	TX	Education - K-12	152,000
	La Valentina North	Sacramento	CA	Multifamily	19,875
	Maharishi University of Management Sustainable Living Center	Fairfield	IA	Education - higher	6,900
	McGrory Glass Facility	Paulsboro	NJ	Warehouse	108,000
	Morphosis Architecture Studio	Culver City	CA	Office	11,600
	North Shore Community College Health and Student Services Building	Danvers	MA	Education - higher	58,000
2012	Paisano Green Community	El Paso	TX	Multifamily	55,202
2012	Phipps Center for Sustainable Landscapes	Pittsburgh	PA	Public Assembly	24,350
	Sail Lofts	Thomaston	ME	Multifamily	Unknown
	San Luis National Wildlife Refuge Complex Headquarters and Visitor Center	Los Banos	CA		17,000
	Skaneateles Village Hall	Skaneateles	NY	Office	3,723
	Smith College Bechtel Environmental Classroom <sup>1</sup>	Northhampten	МА	Education - higher	2,500
	St. Petersburg Net Zero Office (Sierra Club)	St. Petersburg	FL	Office	Unknown
	Student Services Center at Mesa College	San Diego	CA	Education - higher	85,000
	UC Davis West Village (eco district)	Davis	CA	Mixed use	District
	UniverCity Childcare Centre	Burnaby	Canada	Education - other	5,690
	Vernonia School k-12	Vernonia	OR	Education - K-12	135,000
	Zero Energy Research Lab at University of North Texas	Denton	ТХ	Education - higher	1,200

Project Completion	Name	Location	State	Building Type	Size (sf)
	435 Indio	Sunnyvale	CA	Office	31,800
	Beckstoffer's Mill Senior Housing Complex	Richmond	VA	Multifamily	8,000
	Blackford School Multi-Use Building	San Jose	CA	Education - K-12	Unknown
	Bright 'n Green-'Sandy Resistant' Multi-Use Project	Brooklyn	NY	Multifamily	Unknown
	Centre of Excellence at Okanagan College	Kelowna	Canada	Education - higher	61,100
	College of the Desert West Valley Campus- Phase 1	Palm Springs	CA	Education - higher	Unknown
	Delta Building - NYC	Brooklyn	NY	Mixed Use	2,700
	Ewa Elementary School Portable Classroom	Oahu	HI	Education - K-12	Unknown
	Exploratorium	San Francisco	CA	Other	330,000
	Forest Service's Technology and Development Center	San Dimas	CA	Office - Other	Unknown
	Foundry Court by Nexus Homes	Philadelphia	PA	Multifamily	Unknown
	General Aviation Terminal	Appleton	WI	Airport	8,000
	IBEW Local 595 Zero Net Energy Center	San Leandro	CA	Education - general	46,000
	Keene State College Technology, Design and Safety Building	Keene	NH	Education - higher	53,000
	King County Housing Authority Administration Building	Tukwila	WA	Office	36,000
	Lane Community College, Downtown Academic Center	Eugene	OR	Education - higher	90,000
2013	Lenawee Intermediate School District Center for a Sustainable Future	Adrian Township	MI	Education - K-12	Unknown
	Los Angeles Harbor College Sciences Complex	Los Angeles	CA	Education - higher	73,767
	Los Guilicos	Santa Rosa	СА	Public Order - Safety	149,000
	Park Slope Brooklyn ZNE Brownstone	Brooklyn	NY	Multifamily	7,000
	PNC Net-Zero Branch - Ft. Lauderdale	Ft. Lauderdale	FL	Retail	4,900
	Salt Lake City Public Safety Building	Salt Lake City	UT	Public Order - safety	175,480
	SMUD Net Zero Campus - East Campus- Operations Center	Sacramento	CA	Office	350,000
	Sokol Blosser Winery Tasting Room	Dundee	OR	Retail	5,000
	Solterra EcoLuxury Apartments	San Diego	CA	Multifamily	Unknown
	Taliesin West Net Zero Retrofit - Frank Lloyd Wright	Scottsdale	AZ	Education - general	District
	UC Davis Jess S. Jackson Sustainable Winery Building	Davis	CA	Education - higher	8,000
	UC San Diego J. Craig Venter Institute	La Jolla	CA	Laboratory	45,000
	VF Outdoor HQ	Alameda	CA	Office	160,000
	Walgreens Evanston Store	Evanston	IL	Retail	14,000
	Wayne Aspinall Federal Building and Courthouse	Grand Junction	CO	Other	41,562
	Chatham University Eden Hall Campus	Richland Township	PA	Education - higher	District
	Craftsbury Outdoor Center Lodge	Craftsbury Common	VT	Other	Unknown
2014	DPR San Francisco Office	San Francisco	CA	Office	24,000
	East Bay MET School	Newport	RI	Education - K-12	16,800
	Family Pet Hospital	Clovis	CA	Other	Unknown

Project completion	Name	Location	State	Building Type	Size (sf)
	First Housing Development Corp	Tampa	FL	Office	17,000
	Kaiser Permanente Antelope Valley Specialty Medical Office Building	Lancaster	CA	Multifamily	136,800
	Kalaeloa NZE Community	Honolulu	HI	Multifamily	District
	LPL Financial Center at La Jolla Commons	San Diego	CA	Office	415,000
	La Escuelita Education Center	Oakland	CA	Education - K-12	123,000
	Massachusetts Division of Fisheries & Wildlife - Field Headquarters Building	Westborough	MA	Office	45,000
2014	Monarch School Classroom	Houston	ТХ	Education - K-12	1,120
2014	Oak Park High School	Oak Park	CA	Education - K-12	960
	Park Place Parking Structure	Missoula	МТ	Retail	3,000
	Pflugerville Elementary School	Pflugerville	ТХ	Education - K-12	93,000
	Richard J. Lee Elementary School	Coppell	TX	Education - K-12	95,633
	Solana Ranch Elementary School	San Diego	CA	Education - K-12	68,000
	Student Success and Retention Center at East Los Angeles College	Los Angeles	CA	Education - higher	136,000
	University of Minnesota Itasca Biological Station and Laboratories	Lake Itasca	MN	Education - higher	10,900
	WATCH LIST: ZNE EMERGING IN PLANNI	NG, DESIGN, CONSTRUC	CTION OR D	DATE UNKNOWN	
	64 Catherine Street	Boston	MA	Multifamily	1,416
	Ankeny Row Townhomes	Portland	OR	Multifamily	District
	University of Wisconsin- Arlington Agricultural Research Station	Arlington	WI	Education - higher	District
	BEST Center at Laney College	Oakland	CA	Education - higher	District
	Boy Scouts of America The Summit Bechtel Reserve Treehouse	Glen Jean	WV	Public Assembly	Unknown
	California Department of Motor Vehicles	Various	CA	Office	Unknown
	California DOT SFOBB Phase 2 Warehouse	San Francisco	CA	Warehouse	Unknown
	Dr. Martin Luther King, Jr. School	Cambridge	MA	Education - K-12	140,000
	Camp Parks	Dublin	CA	Military	District
	Charlotte-Douglas Airport - Fire Rescue and Fire Facility	Charlotte	NC	Public Order- safety	Unknown
	Electrical and Computer Engineering Building and University of Illinois	Urbana/Champaign	IL	Education - higher	250,000
	Fort Bliss	Fort Bliss	TX	Military	District
	Fort Carson	Fort Carson	CO	Military	District
	Fort Detrick	Frederick	MD	Military	District
	Fort Hunter Liggett	Jolon	CA	Military	District
	Green Leaf Inn	Delavin	WI	Other	Unknown
	Green Phoenix Learning Center	Phoenix	AZ	Education - K-12	Unknown
	Greensburg Kansas Net Zero Community	Greensburg	KS	Mixed use	District
	Grow Community	Bainbridge Island	WA	Multifamily	District
	Gunderson Health System	Various	WI	Healthcare	Portfolio
	Hanover Page Mill Building	Palo Alto	CA	Office	89,584

Project Completion	Name	Location	State	Building Type	Size (sf)
	IKEA		NA	Retail	District
	Indian Creek Nature Center	Cedar Rapids	IA	Other	1 <i>2,000</i>
	Kaupuni Village	Oahu	HI	Multifamily	District
	Lowry Redevelopment Multi-Family ZNE	Denver	CO	Multifamily	District
	Market 1	Des Moines	IA	Office	50,000
	Net Zero Plus Electrical Training Institute	Los Angeles	CA	Education - general	142,000
	Oregon National Guard	Multiple	OR	Military	District
	Orangewood Middle School and studio project	Phoenix	AZ	Education - K-12	Unknown
	P.S. 62	Staten Island	NY	Education - K-12	68,680
	Rocky Mountain Institute Innovation Center	Basalt	CO	Office	15,610
	Salt Lake City District Attorney Office	Salt Lake City	UT	Office	Unknown
	Sierra Army Depot	Herlong	CA	Military	District
	Sierra Nevada Aquatic Research Lab - UC Santa Barbara	Mammoth Lakes	CA	Education - higher	2,696
	UC Merced	Merced	CA	Education - higher	District
	UC Santa Barbara Recreation Center	Santa Barbara	CA	Education - higher	Unknown
	UC Santa Barbara Student Services Buildings	Santa Barbara	CA	Education - higher	Unknown
	UniverCity	Burnaby	Canada	Mixed use	District
	University of South Carolina Darla Moore School of Business	Columbia	SC	Education - higher	250,000
	Valatie Free Library	Hudson River Valley	NY	Library	750
	Village in the Bosque Apartments	Bernalillo	NM	Multifamily	District
	West Point USMA	West Point	NY	Military	District
	Zero Energy Nanotechnology Building at SUNY Poly	Utica	NY	Education - higher	356,000

### **Emerging Buildings Total=152**

Note: District in the size category indicates sets of buildings with a common geographical location that are working toward, or have accomplished, net zero and includes communities, campuses, neighborhoods and/or districts. Portfolio indicates sets of buildings that are not in the same location.