

2019 Getting to Zero Project List

Zero Energy Certified
and Verified Buildings



*Verified ZE Building Yosemite Community College Central Services Building
Modesto, CA Credit: Darden Architects*

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institute

2019 Getting to Zero Project List

The best-in-class projects listed here provide a window into the zero energy (ZE) future of the built environment. These trailblazing buildings, portfolios, districts, and campuses have demonstrated that getting to zero energy design and operation is feasible in every climate, market sector, size, and building type across the U.S. and Canada.

The total number of listed ZE projects has grown tenfold in the seven years since NBI produced the first Getting to Zero List in 2012, and new projects are appearing regularly. We expect this momentum to continue as more designers, owners, and occupants gain valuable ZE experience and expertise.

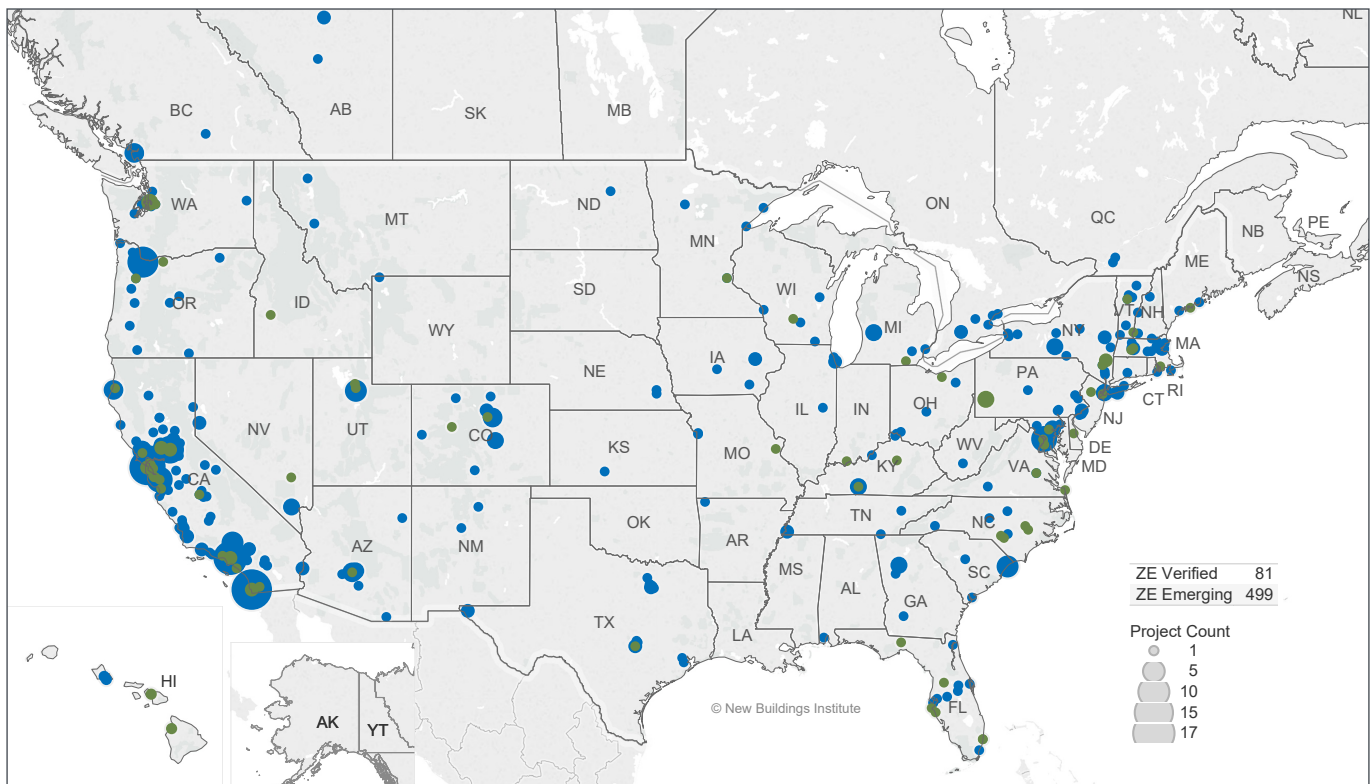
This list includes all Certified and Verified ZE projects known to NBI as of May 2019. There are hundreds of ZE projects in the Emerging category (projects that have not yet achieved ZE, or where NBI does not have data to verify ZE performance) that are not listed here.

For the first time, you can access a live, comprehensive map and list of all ZE Certified, Verified, and Emerging projects across North America and explore trends in ZE buildings with interactive charts and customizable graphics.

Visit the new Getting to Zero Buildings Database:

newbuildings.org/resource/getting-to-zero-database

Zero Energy Project Locations



ZE Verified and Emerging projects plotted by city. Certified projects are included within the verified points.

List Definitions

ZERO ENERGY

projects are buildings or groups of buildings with significantly reduced energy loads, such that 100% or more of the energy use can be met with on-site renewable energy generation annually (off-site renewables are counted toward achieving ZE in certain cases). In this list, projects are categorized as ZE Certified or ZE Verified. For simplicity, projects that have set a zero carbon goal are listed as zero energy.

ZERO ENERGY VERIFIED

projects have achieved ZE for at least one full year and NBI has verified the performance data.

ZERO ENERGY CERTIFIED

projects have been awarded Net Zero Energy (or equivalent) certification by a trusted third party such as the International Living Future Institute (ILFI). The certifier has thoroughly reviewed at least one continuous year of energy consumption and generation data to certify zero energy performance.

Bold text indicates projects that are new to the List.

(L) after the project name indicates a project has achieved USGBC LEED certification (at any level).

(M) after the project name indicates a project that has provided measured energy use data.

SITE EUI

stands for the total gross site-level Energy Use Intensity (EUI), the industry common metric used to measure annual energy use per square foot (sf) of building floor area. Energy use includes consumption from all fuels (grid-delivered and on-site-generated electricity, natural gas, district energy, and delivered fuels) in thousands of British thermal Units (kBtu) per year (yr). That sum is divided by the building's gross size, thus the units are kBtu/sf/yr.

SOURCE EUI

accounts for upstream generation, transmission, and distribution losses associated with delivering usable energy to the site. Site to Source EUI conversions in this list follow the 2018 U.S. Energy Star® Portfolio Manager guidelines.¹

NET EUI

is annual energy use minus annual on-site renewable generation, divided by the building's floor area in sf. A building with a measured net EUI (site or source) less than zero has achieved ZE.

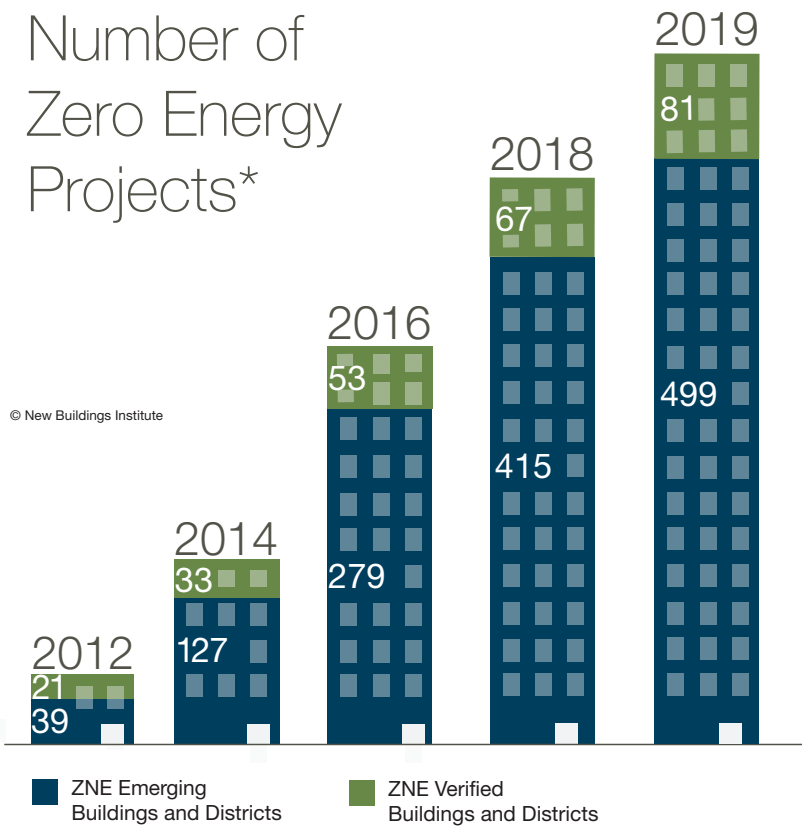
ZEPI

is a metric on a 0-100 scale that sets a constant goal of ZE and is normalized by climate and building type.

¹ See the [2018 US Energy Star Portfolio Manager Source Energy Technical Reference Document](#)

Number of Zero Energy Projects*

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*Numbers reflect the size of the list at the time of publication.

Zero Energy Certified

| Year Completed | Project Name | City | State | Building Type | Size (sf) | Total Site EUI | Source EUI | Net Site EUI | Net Source EUI | zEPI Score |
|----------------|---|-----------------|-------|-----------------|-----------|-------------------|---------------|--------------------|----------------------|---------------|
| 2007 | lDeAs Z2 Design Facility (M) | San Jose | CA | Office | 6,557 | 22.6 | 63.3 | -0.6 | -1.6 | -1 |
| 2009 | Chrisney Library (M) | Chrisney | IN | Public Assembly | 2,413 | 16.7 | 46.7 | -0.8 | -2.2 | -1 |
| 2009 | Living Learning Center at Tyson Research Center (M) | Eureka | MO | Education | 2,968 | 24.5 | 68.5 | -1.9 | -5.5 | -2 |
| 2009 | Omega Center for Sustainable Living (L) (M) | Rhinebeck | NY | Education | 6,200 | 13.2 | 37.0 | -8.3 | -23.1 | -8 |
| 2009 | Pringle Creek Painter's Hall (L) (M) | Salem | OR | Public Assembly | 3,595 | 11.1 | 31.1 | -4.3 | -11.9 | -5 |
| 2009 | Putney Field House (L) (M) | Putney | VT | Education | 16,800 | 9.7 | 27.2 | -0.7 | -2.0 | -1 |
| 2010 | Bertschi School Science Wing (L) (M) | Seattle | WA | Education | 1,425 | 48.0 | 134.4 | -0.4 | -1.1 | 0 |
| 2010 | DPR Construction San Diego Net Zero Office (L) (M) | San Diego | CA | Office | 24,000 | 14.8 | 46.1 | -2.4 | -7.8 | -3 |
| 2010 | Energy Lab at Hawaii Preparatory Academy (L) (M) | Kamuela | HI | Education | 5,902 | 11.0 | 30.9 | -17.0 | -47.5 | -15 |
| 2010 | Hood River Middle School Net-Zero Addition (L) (M) | Hood River | OR | Education | 5,331 | 26.8 | 74.9 | -0.4 | -1.0 | 0 |
| 2010 | Richardsville Elementary School (L) (M) | Bowling Green | KY | Education | 72,285 | 19.0 | 53.2 | -2.6 | -7.2 | -3 |
| 2011 | Coastal Maine Botanical Gardens Bosarge Family Education Center (L) (M) | Boothbay | ME | Education | 8,200 | 19.2 | 53.6 | -4.3 | -12.1 | -4 |
| 2011 | Locust Trace AgriScience Campus (High School) (M) | Lexington | KY | Education | 70,000 | 9.9 | 27.6 | -0.7 | -2.0 | -1 |
| 2011 | TD Bank Branch (L) (M) | Fort Lauderdale | FL | Office | 3,970 | 91.8 | 257.1 | -3.8 | -10.5 | -4 |
| 2011 | zHome (M) | Issaquah | WA | Multifamily | 5,813 | 21.0 | 58.8 | -1.0 | -2.8 | -2 |
| 2012 | Bullitt Foundation Cascadia Center for Sustainable Design and Construction (M) | Seattle | WA | Office | 51,800 | 9.7 | 27.2 | -6.9 | -19.4 | -10 |
| 2012 | David and Lucile Packard Foundation (L) (M) | Los Altos | CA | Office | 49,161 | 24.4 | 68.3 | -4.6 | -12.9 | -7 |
| 2012 | DPR Construction Phoenix Net Zero Office (L) (M) | Phoenix | AZ | Office | 16,533 | 26.8 | 74.9 | -2.7 | -7.6 | -3 |
| 2012 | Phipps Center for Sustainable Landscapes (L) (M) | Pittsburgh | PA | Public Assembly | 24,350 | 18.2 | 51.0 | -0.5 | -1.3 | 0 |
| 2012 | Sacred Heart Schools Stevens Family Library (L) (M) | Atherton | CA | Education | 6,800 | 13.2 | 37.0 | -17.6 | -49.2 | -22 |
| 2012 | Smith College Bechtel Environmental Classroom (M) | Northampton | MA | Education | 2,500 | 11.5 | 32.1 | -6.2 | -17.3 | -6 |
| 2013 | 435 Indio Ave (M) | Sunnyvale | CA | Office | 31,800 | 13.5 | 37.8 | -15.2 | -42.4 | -23 |
| 2013 | PNC Net-Zero Branch - Ft. Lauderdale (L) (M) | Ft Lauderdale | FL | Office | 4,766 | 59.1 | 165.4 | -5.4 | -15.0 | -6 |
| 2013 | Sandy Grove Middle School (L) (M) | Lumber Bridge | NC | Education | 74,000 | 19.3 | 54.0 | -14.5 | -40.6 | -14 |
| 2013 | West Berkeley Public Library (L) (M) | Berkeley | CA | Public Assembly | 9,399 | 21.7 | 60.7 | -3.8 | -10.8 | -5 |

Zero Energy Certified

| Year Completed | Project Name | City | State | Building Type | Size (sf) | Total Site EUI | Source EUI | Net Site EUI | Net Source EUI | zEPI Score |
|----------------|--|----------------|-----------|---------------|--------------|----------------|-------------|--------------|----------------|------------|
| 2014 | Brock Environmental Center (L) (M) | Virginia Beach | VA | Education | 10,500 | 14.6 | 40.8 | -14.0 | -39.3 | -14 |
| 2014 | DPR San Francisco Office (L) (M) | San Francisco | CA | Office | 24,010 | 21.6 | 60.4 | -0.5 | -1.4 | -1 |
| 2014 | Willow School (L) (M) | Gladstone | NJ | Education | 20,000 | 21.8 | 61.1 | -13.1 | -36.8 | -12 |
| 2015 | Indigo Hammond & Playle Architects Office (M) | Davis | CA | Office | 4,100 | 16.8 | 47.0 | 0.0 | -0.1 | 0 |
| 2015 | Phipps Conservatory SEED Classroom (L) (M) | Pittsburgh | PA | Education | 950 | 14.5 | 40.7 | -6.3 | -17.6 | -6 |
| 2015 | Rocky Mountain Institute Innovation Center (L) (M) | Basalt | CO | Office | 15,610 | 16.8 | 47.0 | -9.4 | -26.5 | -12 |
| 2015 | Suncoast Credit Union - Bushnell Service Center (M) | Bushnell | FL | Office | 3,743 | 6.8 | 19.0 | -1.6 | -4.5 | -2 |
| 2016 | King Street (L) (M) | Seattle | WA | Office | 3,680 | 17.5 | 49.0 | -8.8 | -24.6 | -12 |
| 2016 | Maclay Architects' Office (M) | Waitsfield | VT | Office | 2,568 | 22.1 | 61.8 | -2.9 | -8.1 | -3 |



Verified ZE Building Discovery School | Arlington, VA Credit: VMDO Architects

We know there are more projects than we have captured here. We encourage you to submit zero energy and ultra-low projects through our registry so we can recognize these leaders in the growing field of zero energy buildings.

Be Counted at
newbuildings.org/share.

Zero Energy Verified

| Year Completed | Project Name | City | State | Building Type | Size (sf) | Total EUI | Source EUI | Net EUI | Net Source EUI | zEPI Score |
|----------------|---|-----------------|-----------|-----------------|----------------|-------------|-------------|-------------|----------------|------------|
| 2000 | Oberlin College Lewis Center (M) | Oberlin | OH | Education | 13,600 | 31.4 | 87.8 | -5.5 | -15.5 | -5 |
| 2001 | Environmental Tech. Center Sonoma State (M) | Rohnert Park | CA | Education | 2,200 | 2.3 | 6.5 | -1.5 | -4.1 | -2 |
| 2003 | Audubon Center at Debs Park (off grid) (L) (M) | Los Angeles | CA | Other | 5,020 | 17.1 | 47.9 | 0.0 | 0.0 | 0 |
| 2003 | Science House (M) | St. Paul | MN | Other | 1,532 | 18.0 | 50.4 | 0.0 | 0.0 | 0 |
| 2004 | Challengers Tennis Club (M) | Los Angeles | CA | Other | 3,500 | 9.0 | 25.0 | 0.0 | -0.2 | 0 |
| 2005 | CDPH Richmond Labs, Building P (L) (M) | Richmond | CA | Office | 205,000 | 25.4 | 70.3 | -4.3 | -12.7 | -7 |
| 2005 | Hawaii Gateway Energy Center (L) (M) | Kailua-Kona | HI | Other | 5,600 | 28.0 | 78.4 | -3.0 | -8.4 | -4 |
| 2007 | Aldo Leopold Legacy Center (L) (M) | Baraboo | WI | Office | 11,900 | 16.0 | 44.8 | -2.0 | -5.6 | -2 |
| 2008 | Bagatelos Architectural Glass Solutions (M) | Sacramento | CA | Other | 63,000 | 11.6 | 32.5 | -0.5 | -1.3 | -1 |
| 2008 | Camden Friends Meeting Social Hall (L) (M) | Camden | DE | Public Assembly | 3,121 | 17.9 | 50.0 | -1.8 | -5.1 | -2 |
| 2008 | Environmental Nature Center (L) (M) | Newport Beach | CA | Education | 8,535 | 17.6 | 49.3 | -10.1 | -28.3 | -12 |
| 2008 | Hudson Valley Clean Energy HQ (M) | Rhinebeck | NY | Office | 5,470 | 9.8 | 27.3 | -0.6 | -1.7 | -1 |
| 2009 | Bacon St. Offices (L) (M) | San Diego | CA | Office | 4,500 | 12.7 | 35.6 | -9.5 | -26.6 | -13 |
| 2009 | Watsonville Water Resources Center Admin Building (L) (M) | Watsonville | CA | Office | 16,000 | 51.4 | 142.7 | -66.4 | -187.1 | -101 |
| 2010 | Dovetail Construction HQ Barn (L) (M) | Richmond | VA | Office | 6,800 | | | 0.0 | | 0 |
| 2010 | NREL Research Support Facility (L) (M) | Golden | CO | Office | 222,000 | 46.1 | 129.1 | 0.0 | 0.0 | 0 |
| 2011 | Anna Maria Historic Green Village (L) (M) | Anna Maria | FL | Other | 9,797 | 28.2 | 79.0 | -6.6 | -18.4 | -7 |
| 2011 | Diamond X Ranch Student Intern Center-Malibu (M) | Calabasas | CA | Public Assembly | 3,500 | 31.5 | 88.2 | -3.6 | -10.0 | -4 |
| 2011 | EcoCenter at Heron's Head Park (off grid) (L) (M) | San Francisco | CA | Education | 2,400 | (off grid) | | | | |
| 2012 | Leon County Cooperative Extension (M) | Tallahassee | FL | Office | 13,000 | 19.4 | 54.3 | -0.2 | -0.6 | 0 |
| 2012 | Plaza Point (L) (M) | Arcata | CA | Multifamily | 20,283 | 15.3 | 42.8 | -1.0 | -2.9 | -2 |
| 2013 | IBEW Local 595 Zero Net Energy Center (M) | San Leandro | CA | Education | 45,001 | 15.0 | 42.0 | -6.0 | -16.8 | -7 |
| 2013 | Lenawee Intermediate School District Center for a Sustainable Future (M) | Adrian | MI | Education | 8,750 | 7.7 | 21.6 | -2.4 | -6.7 | -2 |
| 2014 | 231 Main Street (Alfandre Architecture, EcoBuilders, and Others) (L) (M) | New Paltz | NY | Office | 5,400 | 45.2 | 126.4 | -7.5 | -21.0 | -9 |
| 2014 | DMV Fresno Field Office (L) (M) | Fresno | CA | Office | 19,808 | 23.1 | 64.6 | -20.4 | -57.0 | -28 |

Zero Energy Verified

| Year Completed | Project Name | City | State | Building Type | Size (sf) | Total EUI | Source EUI | Net EUI | Source EUI | zEPI Score |
|----------------|---|---------------|-------|-----------------------|-----------|-----------|------------|---------|------------|------------|
| 2014 | Jess Jackson Sustainable Winery Building (M) | Davis | CA | Warehouse and Storage | 8,500 | 1.4 | 3.9 | -1.3 | -3.6 | -5 |
| 2014 | Odyssey Elementary School (M) | Woods Cross | UT | Education | 84,785 | 15.0 | 42.0 | -1.8 | -5.0 | -2 |
| 2014 | Pahranagat National Wildlife Refuge Administrative Office and Visitor Contact Station (M) | Alamo | NV | Public Assembly | 5,000 | 27.8 | 78.0 | -12.0 | -33.6 | -12 |
| 2015 | AP+I Design (M) | Mountain View | CA | Office | 14,300 | 17.9 | 50.1 | -0.5 | -1.3 | -1 |
| 2015 | Bishop O'Dowd High School, Environmental Science Center (L) (M) | Oakland | CA | Education | 3,275 | 18.0 | 50.3 | -0.7 | -1.9 | -1 |
| 2015 | Discovery Elementary School | Arlington | VA | Education | 98,000 | 15.5 | 43.4 | -3.6 | -10.1 | -4 |
| 2015 | Frick Environmental Center (M) | Pittsburgh | PA | Public Assembly | 15,500 | | | -2.1 | | -2 |
| 2015 | Grantham Middle School (M) | Goldsboro | NC | Education | 86,400 | 18.2 | 51.0 | -7.9 | -22.0 | -8 |
| 2015 | P.S. 62 (Kathleen Grimm School of Leadership and Sustainability) (M) | Staten Island | NY | Education | 68,680 | 32.7 | 88.2 | -1.0 | -6.1 | -1 |
| 2015 | Potomac Watershed Center (L) (M) | Accokeek | MD | Education | 3,971 | 44.2 | 123.9 | -1.7 | -4.8 | -2 |
| 2015 | R W Kern Center at Hampshire College | Amherst | MA | Education | 16,950 | 23.4 | 65.6 | -3.0 | -8.4 | -3 |
| 2015 | Sarasota Audubon Nature Center (L) (M) | Sarasota | FL | Education | 2,500 | 10.3 | 28.8 | -5.3 | -14.9 | -5 |
| 2016 | Alpine Branch Library (L) (M) | Alpine | CA | Public Assembly | 12,681 | 29.1 | 81.5 | -1.0 | -2.7 | -1 |
| 2016 | Arch Nexus SAC Office (L) | Sacramento | CA | Office | 8,200 | 36.3 | 101.7 | -3.4 | -9.5 | -5 |
| 2016 | Kay's Creek Elementary School (M) | Kaysville | UT | Education | 84,785 | 14.2 | 39.8 | -1.9 | -5.4 | -2 |
| 2016 | Lumbree River EMC (M) | Raeford | NC | Office | 10,000 | 37.9 | 106.0 | -12.2 | -34.1 | -15 |
| 2016 | Maui Army Reserve Center (M) | Wailuku | HI | Education | 15,361 | 35.5 | 99.5 | -0.1 | -0.1 | 0 |
| 2016 | Sbrega Technology and Learning Center - Bristol Community College (M) | Fall River | MA | Education | 50,679 | 45.0 | 104.3 | -15.9 | -66.2 | -15 |
| 2016 | Spring Creek Middle School (M) | Seven Springs | NC | Education | 96,000 | 19.2 | 53.7 | -3.5 | -9.6 | -3 |
| 2016 | Twenty Mile Farm Administration and Maintenance Building (L) (M) | Boise | ID | Office | 15,222 | 11.3 | 31.6 | -7.3 | -20.5 | -10 |
| 2017 | Wilde Lake Middle School (M) | Ellicott City | MD | Education | 106,221 | 13.8 | 38.6 | -11.2 | -31.4 | -11 |
| 2018 | Lakeline Learning Center (M) | Austin | TX | Education | 6,000 | 43.0 | 120.4 | 0.0 | 0.0 | 0 |



Targets for zero energy and zero carbon outcomes are growing exponentially. Forecasts show \$78.8 billion of growth in the global zero energy (ZE) building market by 2025, according to Grand View Research Inc.

ZE Certified Omega Center for Sustainable Living | Rhinebeck, NY Credit: Omega Institute

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New Buildings Institute (NBI) is a nonprofit organization driving better energy performance in buildings. We work collaboratively with industry market players—governments, utilities, energy efficiency advocates, and building professionals—to promote advanced design practices, innovative technologies, public policies, and programs that improve energy efficiency. We also develop and offer guidance and tools to support the design and construction of energy efficient buildings.

Throughout its 20-year history, NBI has become a trusted and independent resource helping to drive buildings that are better for people and the environment.

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