Zero Net Energy
MESSAGE PLATFORM

Zero net energy (ZNE) buildings are becoming the new standard for achieving significant energy savings and reducing emissions in the built environment. California set an aggressive course for a new "zero finish line" knowing it will lead to the highest levels of efficiency in buildings, more renewable energy generation, and less carbon emissions. Yet agencies understand that regulation alone will not get the state to its goals by 2020 and 2030. To advance ZNE adoption, effective communications are essential to help catalyze voluntary investment and innovation, and motivate building owners, buyers and developers to prioritize ZNE while mandatory codes and standards evolve.

ZNE Communications
This Message Platform presents strong, overarching core messages and supplemental supporting messages targeting key audiences. It will create the basis of how stakeholders talk about ZNE and is designed to help define ZNE buildings and demonstrate that ZNE is a tangible, achievable benchmark and the future of buildings in California.

"The two words information and communication are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through."

- Sydney Harris
This platform is the foundation of a ZNE Communications Toolkit that will:

1. **Advance consistent messages around ZNE buildings and California’s efforts.**
   There are many champions advocating for ZNE policies and practices, each bringing their own perspective. Personalizing communications makes them memorable and connects people to information—a good thing—and is often the difference between educating audiences and persuading them to act. However, having a common vocabulary for primary ZNE concepts and benefits, and consistently describing the same information is just as critical. A shared set of messages reduces confusion and increases the likelihood and speed that key groups will adopt ZNE.

2. **Present a suite of resources that champions and others can use to expand ZNE.**
   The toolkit contains factsheets, frequently asked questions, presentation templates, project snapshots and strategies to aid ZNE Champions & their staff on external outreach and education efforts.

**Major Communication Goals**
The "Path to Zero" in California refers to a communication-based effort associated with the state's Long-Term Energy Efficiency Strategic Plan that sets outreach, education and marketing goals to build momentum and understanding for ZNE. The work has been focused on developing needed tools and resources for engaged stakeholders to help clarify a general "working" definition for ZNE and influential language that will motivate key audiences and decision makers to "go ZNE" and begin the process of integrating ZNE goals into plans for new and existing buildings within their or authority. ZNE communication goals include:

- Promote and support influential champions and early adopters as effective, credible "messengers" that make the case for the financial, operational and promotional value of ZNE.
- Educate key audiences about the fundamentals of "going ZNE," from design to use and operations.
- Accelerate market adoption through increased media attention and endorsement of existing ZNE buildings of all types and sizes and their actual benefits.

---

A ZNE building produces as much energy through clean, renewable resources as it consumes over the course of a year.

– Definition of ZNE
• Establish California’s leadership on ZNE nationally to inspire other states to set aggressive goals and advance them learning from California’s lessons and data.

• Mitigate market barriers and opposition to ZNE with evidence that ZNE is achievable and makes sense for businesses, schools, and public buildings.

Talking About ZNE

Clarity on what and why is most important for the general messages. The goal is to describe ZNE in a simple and compelling way to "get in the door." General messages are also used as the "umbrella," a consistent, familiar opening that ties together all the different audience-specific messages.

Without the benefit of message testing, language used in the near term for topline talking points should reflect the latest opinion research and practical knowledge of what resonates and what does not. Emphasis areas include:

1. Ingenuity, leadership
2. Prosperity, economic development, better bottom line
3. Local pride, resilience and problem-solving

Top-Level Narrative

To save massive amounts of energy, reduce carbon emissions and get the highest performance and value from all homes and buildings, California has set a course to achieve Zero Net Energy (ZNE) in the next two decades. **ZNE buildings are better buildings.** They offer comfortable homes with higher resale value and more productive workspaces. They are highly efficient and more resilient to economic and climate changes. There are buildings today of many types and sizes where ZNE has been achieved with acceptable incremental costs, and more emerge in California each year. Getting to ZNE will help residents and businesses save money, and will bolster innovation and technological development to meet our energy needs locally.

“The difference between the right word and the almost right word is the difference between lightning and a lightning bug.”

– Mark Twain

Bacon Street Offices | San Diego, CA
Architects Hanna Gabriel Wells building was the first ZNE office building in San Diego County.
**Sound Bite**

California is moving buildings to their highest levels of performance: Zero Net Energy. These are very well design and operated high performing buildings that combine energy efficiency and renewables to produce as much energy as they consume annually. ZNE buildings are possible today, and as a leader in clean energy, California is well positioned to make ZNE standard practice.

**Talking Points**

**California’s Goals**

To save massive amounts of energy and get the highest performance from all homes and buildings, California has set a course for a superior built environment with Zero Net Energy (ZNE) in the next two decades. These goals will be met through deep levels of energy efficiency and clean distributed generation. California’s Big Bold goals include:

- All new residential construction in California will be ZNE by 2020.
- All new commercial construction will be ZNE by 2030.
- Retrofitting 50% of existing buildings to ZNE by 2030.

California has established leadership in efficiency and clean energy for decades. We have the talent and expertise right here to move our buildings to the new “finish line” and implement zero net energy solutions.

**What is ZNE and how is it achieved?**

A ZNE building is highly energy efficient and produces as much energy as it consumes over the course of a year through clean, renewable resources.

1. **Develop an integrated design approach** that considers systems and incorporates multiple strategies such as daylighting to decrease energy use and increase comfort, an air-tight, well-insulated building shell, and ensure that the building is properly sited to maximize passive cooling and ventilation.
2. **Apply highly energy-efficient technologies** including HVAC, lighting and controls equipment. Include proper metering equipment.

3. **Optimize the way the building operates and how people use it**, including management of plugged-in devices and controls.

4. **Install renewable generation** to meet the remaining energy needs of the building.

**Why ZNE is good for Californians**
The state’s zero net energy goals offer Californians the opportunity to do what we do best—lead and innovate.

- Investment in ZNE practices and technologies creates local jobs and new products that can be exported worldwide, strengthens local economies, and helps us gain control of our energy future.
- Pursuit of ZNE means California’s economy will be stronger and we will continue to lead the rest of the nation in clean energy.
- ZNE buildings and homes in California are higher performing, and more resilient to economic and climate changes.
- California’s homeowners and businesses will pay less for energy—money they can spend on necessities or use to grow the company.

**Why ZNE benefits everyone**
ZNE buildings help fight pollution and address the harmful impacts of climate change. Nearly 40% of greenhouse gas (GHG) emissions are attributed to the design, construction, and operation of buildings.

**Going ZNE means less energy use from fossil fuels and lower emissions, which means cleaner air for everyone to breathe, and healthier, livable communities.**

- ZNE buildings mean significantly lower carbon emissions, which supports the air quality goals of cities, states and communities across the country that are working to create healthier and more livable environments for all their residents.
• Businesses, families and individuals set goals for lowering their own carbon footprints and being more energy efficient. ZNE homes and buildings help them meet those goals and match new practices for living, buying and working more sustainably.

• Because ZNE buildings and homes use less energy and generate the energy they need from clean, renewable resources the owners benefit from lower utility bills and the entire community benefits from less carbon emissions in the air.

ZNE building policies and projects support air quality goals of California as well as cities and states across the country.
Marketing Definition

A ZNE building is highly energy efficient and produces as much energy as it consumes over the course of a year through clean, renewable resources.

Value Proposition

- Highest level, "new finish line"
- Lower net monthly costs, higher resale value
- Better performing in use and operations, reliable
- Comfortable and productive environment for working, learning and living
- Makes communities stronger, resilient and energy independent
- Helps meet climate goals through lower emissions-less energy and more renewables

Zero Net Energy in California

Communication Goals

- Accelerate market adoption
- Educate key audiences
- Support champions and early adopters
- Establish CA leadership nationally
- Mitigate market barriers and opposition

Key Audiences

- Building Owners and Operators
- Architects and Developers
- Local Government Officials and Staff
- School and Public Building Decisionmakers
- Real Estate Brokers and Managers
- Foundations/funders

Internal Stakeholders

- Champion Groups
- CPUC, CEC
- CARB, Governor’s Office, CalEPA
- Funders
- Regulators
- EE/Environmental Advocates
- Clean technology/EE industry
- Utilities
Targeting Audiences: Supplemental Messages

Messages about ZNE will be most effective when they are customized to the specific groups we want to respond and when they address the needs and concerns of those groups. An important acronym for message development is "WIIFM," "what’s in it for me,” and the best ZNE messages will answer this question for specific priority audiences. They will highlight why ZNE is the better "finish line" for buildings and also show what desire, problem or future goal specific to that group ZNE can address. For accelerated voluntary adoption of ZNE it will not be enough to just showcase the state's goals and future requirements, building owners and other decisionmakers will need to identify with personal benefits.

Building Owners and Operators

When communicating to these professionals, you must consider two different sub groups: commercial real estate owners "CRE Owners" and owners who occupy their buildings "owner occupied." While there is crossover, CRE owners are focused more on the bottom line and brand image than environmental goals or green construction. They know energy costs are one of the single biggest expenses of owning and operating buildings, and that energy management and efficient construction are essential to reducing operating expenses and boosting bottom lines. In owner occupied buildings, owners are also focused on employee retention and productivity, and maintaining a comfortable and healthy environment.

- ZNE buildings reduce operating and equipment replacement costs, and leverage higher rent/lease and promotional value.
- Owning a ZNE building earns your company valuable media attention and recognition among the elite who are making the best business and environmental decisions.
- ZNE buildings have less tenant and employee turnover because they are comfortable, healthy and productive spaces to live and work.
- Public interest and demand is growing for ZNE and will only increase as California takes buildings statewide to ZNE. Leverage the highest return on investment and brand promotion by going ZNE now.
- If you are making a commitment to a high efficiency building, ZNE is the best business decision and adds the most value.
- Building ZNE now puts you ahead of future legislative restrictions, and carbon emission taxes/penalties may force expensive retrofits to inefficient buildings.
**Builders and Contractors**

Builders and contractors will respond to credible messages that stress the increased consumer and policy-driven demand for highly efficient and sustainable homes. However, the strongest messages will also address their concerns about higher costs of building ZNE; the risks of using new products, materials and systems; and complications with regulations and workforce training. Messages should emphasize proven and tested technology and successful ZNE projects of a broad range of building types and sizes.

The technologies, products and systems needed to build ZNE buildings are tested, proven and available. Enterprising builders and contractors who evaluated the overall costs of and benefits of integrating ZNE into their practice are now building their brands, expertise and portfolio around this growing market.

- **Public interest and demand is growing for ZNE and will only increase as California takes buildings statewide to ZNE. Get in front of this new buying movement and incorporate a cost-effective, production scale business model for building ZNE now.**

- **Build your business by building ZNE and serving the growing market for super-efficient homes and workplaces that consumers know will clearly demonstrate energy savings and cover their premium price many times over.**

- **Building codes and regulations in California and other states are quickly evolving toward ZNE. Builders and contractors with the expertise and capacity now to supply ZNE buildings to business leaders and homeowners can gain the promotional value of aligning with the innovators and hedge future costs of hasty training to comply to codes and standards.**

A Zero Energy Home brings together the most forward-thinking practices in building science. Incorporate these technologies... and be among those who are ushering in the next level of sustainability in buildings.

- Deltec Homes, green builders

---

Non-commercial reproduction of this content or use in other materials is allowed. Please cite the source as: “California ZNE Communications Toolkit, July 2013”
Architects and Developers
These professionals are likely already familiar with green building certification programs like LEED and ENERGY STAR. Effectively articulate the market advantage or competitive value of ZNE to these professionals. Position ZNE as an opportunity to establish their expertise in a rapidly growing sector of the building industry.

Being able to deliver ZNE buildings brings a market advantage for your firm and an added value to offer your clients. ZNE means a high performance design that turns a structure into a financial asset with lower bills, greater marketing potential and higher leasing rates. Having a practice that includes ZNE elevates you from your peers as able to produce a building that brings together the highest level of architectural, mechanical, and environmental performance. This is sustainable design at its best.

- Elevate your firm from the rest for delivering buildings that combine comfortable living and working with the highest architectural, mechanical, and environmental performance.
- The technologies and design strategies needed to create ZNE buildings are available today. Embrace the market opportunities presented by ZNE and push high performance design into the mainstream.
- Establish your expertise and capacity for innovative design and development solutions that meet the highest standards for performance and energy savings.

Policymakers, Local Government Officials and Staff
Tap into local government’s desire to be recognized as leaders in energy efficiency. Identify local benefits, and stress resilience and sustainability planning. In discussions, use examples of leading cities to demonstrate achievable and applicable ideas.

Cities and counties that advance ZNE are advancing economic development. ZNE identifies your community with energy leadership, ingenuity, and resilience. Planning for a ZNE future creates practical and achievable energy solutions for residents, and economic and environmental benefits for the city itself.
• ZNE buildings offer local job growth and tax benefits from more local construction. Investment means skill development and career opportunities for residents, economic development, and appeal to companies that provide products and services that support ZNE.

• More ZNE helps meet energy needs locally, achieve reach codes and broader sustainability goals.

• ZNE buildings in your community mean your constituents live, learn and work in the highest performance buildings possible—healthier environments, high productivity—with reduced net monthly costs.

• More ZNE buildings make your community stronger and more resilient in severe weather events and natural disasters.

**Real Estate Brokers and Managers**

This is an important audience to educate on the value of ZNE. The goal is to build champions in this group and minimize opponents—especially in a challenging real estate market.

• ZNE buildings earn higher resale value as potential owners demand more ZNE buildings than available supply, especially as California promotes its Path to Zero.

• The ZNE market in California will only grow and establishing your firm’s experience and expertise will be a market advantage now and into the future.

• As the real estate market recovers more buyers are looking, and they are looking for the best. ZNE buildings provide all the compelling selling points you need—they make more comfortable homes and highly productive workplaces. They have first-rate architectural, mechanical and environmental design, and save owners big money through lower utility bill savings.

• By helping prospective buyers and tenants understand the multiple benefits of ZNE your are building credibility and better informing important decisions.
**Decisionmakers for K-12 Schools and Public Buildings**

With energy bills at California’s K-12 public schools totaling $1.1 billion in 2011 and even more in 2012, innovative energy solutions for schools like ZNE are being proposed as a way to put money back into classrooms and bring public buildings into the 21st century. This group, particularly school district leaders should understand the benefits to the learning and working environment, and know there are examples in California and across the country of other schools and public buildings that have managed to go ZNE.

- **ZNE buildings** that are resource and energy efficient improve the quality of education for school children and university students by providing a healthy and comfortable indoor environment.

- **ZNE schools and public buildings** are visually and acoustically more comfortable, easy to maintain and operate, and a teaching tool that stimulates learning and innovation.

- **We** want our children and community members who spend time in schools and public buildings to reap the benefits of learning and working in a more comfortable, mentally-stimulating, and healthy environment.

- **Schools and public buildings built to ZNE performance** have lower operating costs and over time save money on energy bills that can be spent on services and programs. ZNE also reduces exposure of public budgets to the volatility of energy pricing.

- **For schools**, going ZNE can mean:
  - Heightened student performance and increased average daily attendance
  - Better student & teacher health
  - Improved teacher satisfaction & retention
  - Reduced operating costs

- **Schools and public buildings built ZNE are more resilient and stronger in the face of disasters and the impacts of extreme weather.** They can become important centers for the community with reliable power, heating/cooling sources and shelter.

__Chartwell School | Seaside, CA__
A zero net energy building that serves as a learning environment for children. Image courtesy of EHDD Architecture.

__Schools and public buildings built ZNE have lower operating costs. This means more money for other needed services and programs.____
**Homeowners and Homebuyers**

Homeowners and buyers care about costs, comfort and responsible investment. Messages targeted to homeowners and homebuyers should highlight the savings over time and value of the investment, and reinforce ZNE homes offer the best in comfort, design and energy-saving technology. **Some homeowners are also making lifestyle decisions that compel them to choose sustainable, smart living, so residential sector messages can tap into the benefits of "representing the future of homes in California today."**

- **Have the comfort, the look, the technology, and the savings you need to be happiest in your home.** Owning a ZNE home allows you to live in a comfortable space that brings together the best in energy-saving design, architecture and technology.

- **Exemplify your choice for sustainable living and dramatically reduce your impact on the environment.** Demonstrate the smartest choices with a home that consumes drastically less energy, while producing the energy it needs energy from a clean, renewable resource.

- **Diminish your utility bills watch your investment pay dividends over time** with your insulation from rising energy prices. Own a ZNE home with maximum efficiency and clean energy production, and have monthly bill savings and a hedge against future increases in the price of electricity.

- **Let your home investment work for you.** ZNE homes have lower net monthly costs and a higher resale value. Buy a ZNE home and be among those making the smartest investments and living in highest levels of comfort, reliability and sustainability.

- **ZNE homes are a good idea for homebuyers now.** Incentives are high now in California, and will decline as more solar systems are installed. Get the best incentive you can today, and start the clock on lower net monthly costs and high-comfort living.

"Many people think to have a zero-energy* solar home, you need to start with new construction, spend a small fortune, and/or lose comfort or convenience... In just over a year, we transformed our 1960s tract house in southern California into a solar-powered, energy-efficient home."

—Norma and Alan Williamson

*(pbs.org/wgbh/nova/solar/house.html)