

# Zero Energy Buildings for Local Governments

David Brower Center | Berkeley, CA

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**ABAG**  
ASSOCIATION  
OF BAY AREA  
GOVERNMENTS

**nbi** new buildings  
institute

**BAY  
AREA** Regional  
Energy  
Network

# Who's Here

# BayREN (Bay Area Regional Energy Network)



- Comprised of public agencies representing all nine counties in the Bay Area
- Draws on the expertise, experience, and proven track record of local agencies and their staff
- One of only two regional energy networks in California
- Funding provided by the California Public Utilities Commission (CPUC)

# Programs

- Single Family Home Upgrade Program
- Bay Area Multifamily Building Enhancement Program
- Financing
  - Pay-as-You-Save Water Efficiency
  - Commercial PACE
- Codes and Standards



## Codes and Standards

- A joint effort of Bay Area local governments to achieve full compliance with provisions of the California Energy Code
- A locally driven effort to reduce energy use in buildings through improved design and construction practices, and enhanced code compliance and enforcement.

# Codes and Standards



- **Compliance Improvement:** Investigate areas for improvement in code enforcement processes & offer solutions



- **Training:** Provide support for building industry representatives at **no-cost** to better implement energy code



- **Policy:** Share best practices & develop regional resources for going above code

# Training Offerings

BayREN offers 9 different courses covering residential and nonresidential 2016 energy code compliance and enforcement.

- Residential New Construction
- Residential Forms and Permit Submittals for Additions
- Residential Envelope Compliance
- Residential HERS Registry Training for Building Departments
- Nonresidential New Construction
- Nonresidential Fenestration Compliance
- Nonresidential Mechanical Compliance
- Nonresidential Lighting Compliance
- Nonresidential Tenant Improvements and Alterations

Course Descriptions: <https://www.bayren.org/codes/trainings>

## C&S Impacts

- **Training: 161** Energy Code Trainings with strategies for enhancing compliance
  - 1,461 attending building department staff and building professionals
- **Compliance Improvement: 24** engaged building dept.
  - Resources to promote a greater understanding of the 2013 energy code
  - Best practices to implement the energy code and navigate requirements with maximum efficiency
- **Policy: 16** regional forums to engage stakeholders
  - 847 attending local government staff, policy leaders, and local building professionals



# Today's Goals

- **Learn** about trends, case studies on ZNE buildings, new programs and tools to support local government ZNE policy and plan development
- **Get inspired** – new research and emerging trends
- **Interact** – meet your colleagues and resource providers and ask questions!

# Today's Agenda

| Start Time | Agenda Item |
|------------|-------------|
|------------|-------------|

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|------------|--|
| 8:30 a.m.  | <b>Breakfast &amp; Networking</b>  |
| 9:00 a.m.  | <b>Welcome &amp; Introductions</b>   |
| 9:45 a.m.  | <b>ZNE Case Studies, Pilots &amp; programs</b>   |
| 10:20 a.m. | Break  |
| 10:30 a.m. | <b>Local Government Strategies for Getting to Zero</b>                                   |
| 11:30 a.m. | <b>Planning for ZNE: Introduction &amp; Group Activities</b>                             |
| 12:15 p.m. | Lunch & Keynote Presentation   |
| 1:00 p.m.  | <b>ZNE Tools &amp; Resources</b>   |
| 1:45 p.m.  | <b>Incorporating ZNE into your Policies &amp; Delivery Process</b>                       |
| 1:45 p.m.  | <b>Wrap Up, Key Takeaways, and Next Steps</b>  |
| 3:00 p.m.  | Optional ZNE Building Tour: Berkeley Library West Branch<br><i>Registration Required</i> |

# Today's Speakers



**Heather Seraphina Flint  
Chatto**  
Project Manager, New  
Buildings Institute



**Jacqueline Falconio**  
Resource Conservation  
Specialist,  
County of San Mateo



**Cathy Higgins**  
Research Director, New  
Buildings Institute



**Peter Turnbull**  
Principal, Pacific Gas and  
Electric Company



**Erik Pearson**  
Environmental Services  
Manager, City of Hayward



**Bruce Playle**  
Principal, Indigo I Hammond &  
Playle Architects, LLP



**Betty Seto**  
Department of the Sustainable  
Buildings and Communities  
Head, DNV GL



**Cole Roberts**  
Associate Pricipal, Arup

# Presentations & Materials

All presentations & materials can be downloaded following today's forum:

[www.bayren.org/codes/regional-forums](http://www.bayren.org/codes/regional-forums)