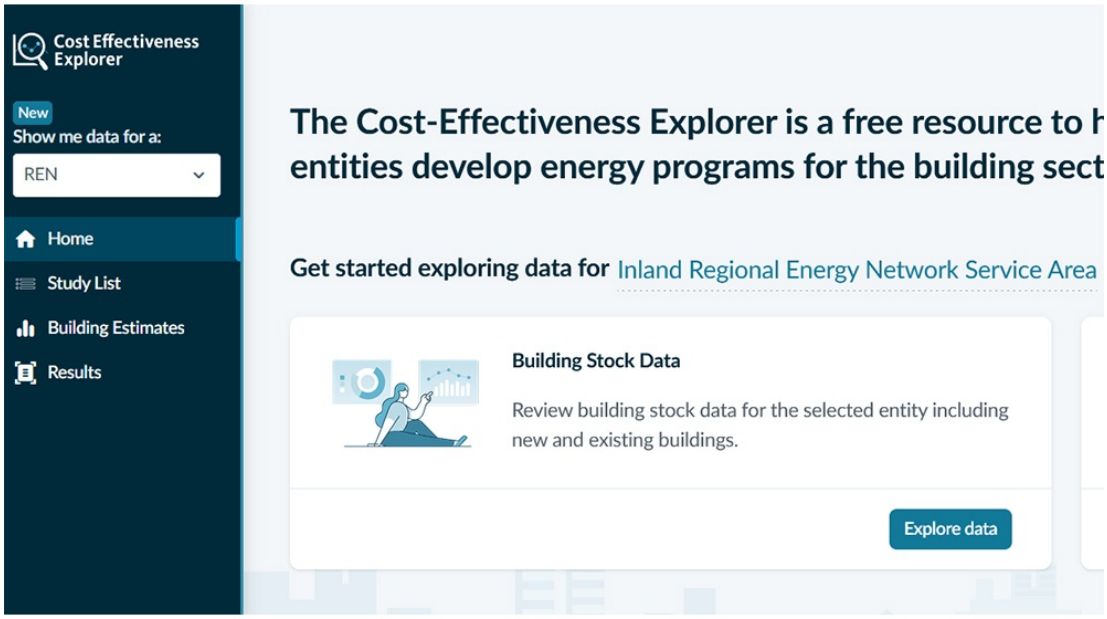
REACH CODE NEWS BRIEF: JULY 2026



WHAT'S NEW WITH THE COST EFFECTIVENESS EXPLORER FOR THE 2025 CODE CYCLE

The Explorer team is continuously updating and adding new capabilities to the free online Cost Effectiveness Explorer, often in response to jurisdiction requests! Currently, the tool offers cost-effectiveness results for 2025 code cycle studies in:

- Single Family Alterations (FlexPath)
- Single Family AC to HP
- Nonresidential AC to HP
- Single Family New Construction

Users can explore policy options for single family alterations now, and the team anticipates adding this capability for single family AC to HP and single family New Construction before the end of summer.

In addition, users can now also view data for different geographic regions, such as a city or county, or broader, regional perspectives such as IOU, CCA, COG or REN service areas.

The team expects results for the 2025 Cost-Effectiveness Studies for Multifamily New Construction and Multifamily Alterations later in Q3.

As always, users can obtain personalized help via the chat bubble in the lower right corner of every webpage. This chat bubble also allows users to easily search the content of support articles to quickly access some of the most common questions and data source details. We encourage you to schedule a brief, personalized walkthrough of the tool by making a one-on-one appointment through the chat bubble.

For more information, visit the Cost Effectiveness Explorer or email Jasmine Krause.

NEW FROM CALIFORNIA ENERGY COMMISSION: CALIFORNIA'S CLEAN ENERGY JOURNEY

The California Energy Commission (CEC) recently published a new resource, California's Clean Energy Journey. This storymap offers a comprehensive look at the history and milestones in the statewide effort to achieve a 100% clean energy future.

The highly interactive storymap focuses on five primary areas:

- Clean and renewable energy
- Clean transportation
- Energy efficiency
- Innovation
- Equity and Tribal Partnerships

Visitors can browse across these focus areas or dig into specific areas for more information. The entire storymap offers dozens of datapoints with links for further information and sources.

The team behind the California's Clean Energy Journey is eager to receive feedback and input from stakeholders, including local jurisdiction staff. They are particularly interested in learning about interesting facts, statistics or examples about the California Energy Code (or a local Reach Code) that resonate with non-technical audiences, videos that explain energy efficiency building standards, or related issues, as well as any other content stakeholders would find valuable.

A survey on the new tool is available here. Or contact Sandra Nakagawa at the CEC with additional ideas.

UPCOMING EVENTS

August 2-7: ACEEE: 2026 Summer Study on Energy Efficiency in Buildings, Pacific Grove.

August 5: 3C-REN C&S training: 2025 CALGreen – Nonresidential

August 6: BayREN and Energy Code Ace training:

Accessory Dwelling Units (ADUs)

August 11: California Powers Up: Energy & Policy Solutions Summit, Sacramento.

August 13: I-REN C&S Training: Intro to CALGreen (2025 Code)

August 13: Sustain SoCal: Water Solutions 11. UC-Irvine

August 17: California Energy Commission: Business Meeting

August 24-26: 2026 WateReuse California Annual Conference. San Francisco.

August 26: BayREN C&S Training: Solar Photovoltaic and Battery Storage Systems

Q&A WITH BECCA EVANS: A NEW LOOK AT PASSIVE HOUSE AND TITLE 24

About Becca

Becca has been working as an engineer at Frontier Energy for the past three years. She provides support for building energy code development through Codes and Standards Enhancement (CASE) and Reach Code work for single family and multifamily applications.

Most recently she led analysis on Passive House requirements and how they relate to Title 24.She currently resides in Davis, CA and holds a BS in Mechanical Engineering from Rice University.

Q: First of all, Becca, can you tell us a little about Passive House (PH) principles and approaches?

A: Of course! Passive House (PH) is a set of voluntary building standards for very high energy efficiency and thermal comfort that substantially reduces a building's carbon footprint. These standards focus on an "envelope first" approach, where the design and construction of a super-insulated, airtight envelope is paramount. Five key principles are super insulation, high performance windows, thermal bridge-free design, airtightness and fresh air ventilation with heat recovery. These design approaches create a 'passive' structure that has significantly reduced energy demand across its lifecycle. While the principles are most common in new construction, they can also be applied to existing building alterations and additions.

Q: Tell us a little about this project, the Passive House and Title 24 Code Comparison Study.

A: As the title implies, this study, conducted with the support of Southern California Edison, compares Passive House and Title 24 standards, highlighting energy, demand, and cost differences. The analysis showed that PH certified homes, specifically single-family prototypes, consistently show lower annual site energy use and reduced peak demand compared to Title 24 prescriptive baselines across most California climate zones (see table 1 below).

Current Title 24 compliance software (CBECC), which is designed to demonstrate compliance with the energy code and not as a design tool, does not consistently recognize or reward the full benefits of PH-level measures such as airtightness, thermal bridging mitigation, HRV/ERV performance, and advanced shading. This results in PH projects in CBECC appearing only marginally better than code minimum or even noncompliant in some climate zones.

Climate Zone	CBECC Prescriptive (kWh)	CBECC-PH Design 1 Equivalent (kWh)	PH Design 1 (kWh)	CBECC-PH Design 2 Equivalent (kWh)	PH Design 2 (kWh)
1	10,276	8,623	5,454	8,028	8,237
2	8,692	7,582	4,879	7,217	7,768
3	7,755	7,241	4,948	6,995	7,312
4	8,249	7,977	5,030	7,126	7,556
5	7,671	6,764	4,414	6,742	7,352
6	6,533	6,225	4,774	6,267	6,995
7	6,495	6,188	5,049	6,285	6,995
8	6,774	6,570	5,089	7,137	7,229
9	6,943	6,610	5,543	7,181	7,427
10	7,153	6,612	4,573	7,434	7,532
11	8,890	7,813	5,519	8,094	8,564
12	8,267	7,197	5,405	7,303	7,946
13	8,688	7,678	5,025	8,342	8,664
14	8,994	7,511	5,021	8,255	8,647
15	9,761	8,723	5,325	9,744	8,990
16	9,799	7,955	5,402	7,747	8,493

Table 1. Single-Family Models – Site Energy Comparison for All Models (kWh). This table summarizes annual site energy use (kWh) for the single-family prototype by climate zone (before PV) comparing: CBECC prescriptive baseline; CBECC–PH Design 1 and CBECC-PH Design 2 equivalent models; and PH Design 1 and PH Design 2 models. In this table, The CBECC-PH equivalent designs are the results of the PH certified designs modeled in CBECC. PH Design 1 and 2 are the results directly from each PH software.

The study also shows that PH construction cost premium estimates can be fairly modest, generally in the 0–5% range relative to code compliant baselines, in more mature PH markets. Limited familiarity and perceived high cost remain obstacles in California, with the largest drivers of cost premiums being high-performance windows, additional exterior insulation, and airtightness detailing. As market familiarity, supply chains, and workforce capacity improve within California, lower premiums can be realized.

Some opportunities for code and software improvement also come to light, such as targeted enhancements to CBECC and Title 24, including development of a formal modeling guide for PH-related projects, improving how airtightness and HRV/ERV systems are credited and others.

Finally, the study offers some policy and market recommendations. These include integrating PH-based or PH-aligned compliance options in future code cycles (e.g., 2031), expanding incentives, training, and pilot projects, developing a PH-capable workforce and creating clear crosswalks and documentation for PH elements in Title 24.

Q: Are there opportunities for local government in this area? Put another way, why should local government staff care about Passive House requirements?

A: Great question! As you know, last fall Governor Newsom signed AB368 into law. This legislation directs the California Energy Commission (CEC) to study the cost effectiveness of Passive House Standards to determine the feasibility of including Passive House standards in the statewide Building Energy Efficiency standards as an alternative compliance pathway. The CEC has until July 1, 2028 to complete its study.

At the local level, cities or counties can explore reach code measures that set higher performance requirements than the base Title 24 code, specifically referencing PH standards for airtightness, insulation, and ventilation. Of course, reach code development using PH standards would also require cost-effectiveness analysis.

The study explores some activity in other states (e.g., Massachusetts and New York) in this area, demonstrating the opportunity for incentivizing PH certification for certain building types, especially multifamily and affordable housing.

Launching local pilot projects or demonstration buildings that pursue PH certification can showcase feasibility, build local expertise, and provide real-world data on costs and performance. These projects can serve as case studies for broader adoption and help de-risk PH for local developers and builders.

Q: Finally, what are some practical next steps that local jurisdiction staff can take if they have an interest in exploring this further?

A: If a local jurisdiction is interested in learning about Passive House reach code opportunities, please reach out to the statewide Local Energy Codes team. Cities and counties can also undertake outreach activities focused on builders to educate them about the benefits of PH, offer resources and perhaps even incentivize PH projects.

This study is available free of charge here, including information about PH-related efforts in other jurisdictions. Other PH resources include Passive House California, PHN, and PHIUS.

Message paid for by customers. This program is funded by California utility customers and administered by Pacific Gas and Electric Company, San Diego Gas & Electric Company (SDG&E®) and Southern California Edison Company under the auspices of the California Public Utilities Commission and in support of the California Energy Commission.

© 2026 Pacific Gas and Electric Company, San Diego Gas and Electric Company and Southern California Edison.

All rights reserved, except that this document may be used, copied, and distributed without modification.

OTHER REACH CODE NEWS BRIEFS

September 2026 August 2026 June 2026
Archives