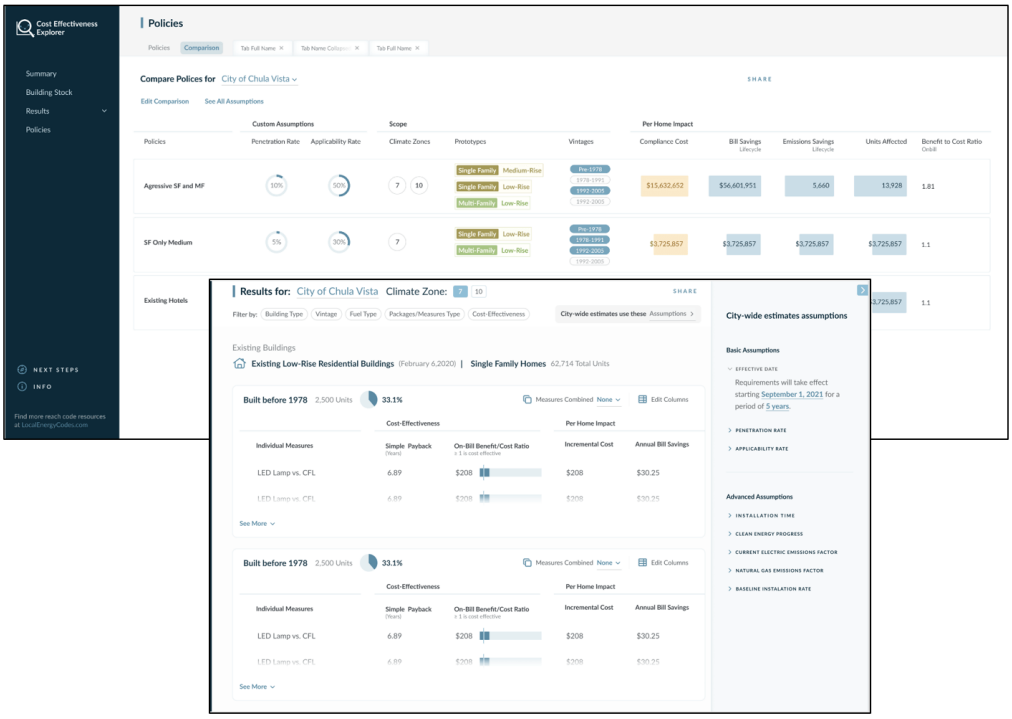
REACH CODE NEWS BRIEF: APRIL 2021

COST-EFFECTIVENESS EXPLORER LAUNCHES ADDITIONAL ROBUST FUNCTIONALITY



The statewide reach codes program is launching the second-generation Cost-Effectiveness Explorer, with enhanced functionality. The program first launched the Cost-Effectiveness Explorer in the fall of 2020 as a free online tool that local jurisdiction staff and other stakeholders could use to simplify initial reach code research. Since then, the tool has been tapped by more than 300 users to identify cost-effective reach code options as well as to better understand the impacts on their local communities of different possible scenarios.

The new features include:

- Summary page - after selecting a location, the visitor receives a high-level summary that identifies the location’s climate zones, lists available studies and provides the number of residential units within each climate zone in that location.
- Building Stock page that serves up estimates of the number of residential units by climate zone, building vintage and type for the location. This data is

viewable in charts or tables; is downloadable as either a .pdf or .csv file; and can easily be shared with a colleague via a unique link.

- Jurisdiction-wide impact estimates: while the results have always shown the per unit impacts for existing low-rise residential buildings, now the tool also models the jurisdiction-wide impact upon adoption of a specific measure, or a group of measures.
- Custom combinations of possible measures – the tool now enables users to build custom combinations of measures for existing low rise residential buildings, ensuring that each specific measure is compatible with others selected.

Additional functionality, expected by the end of Q2 2021 enables users to:

- Control the assumptions used in the jurisdiction-wide impact estimates to see how impact estimates change in real-time.
- Create combinations of existing low-rise residential measures for each vintage and type, to build and save potential policies that might include numerous custom measure combinations, and share them with colleagues.
- Side-by-side comparisons of alternative policies to help staff and Council choose the best option.

“I’ve used the Cost-Effectiveness Explorer extensively in the past several months to help me identify the highest impact, most cost-effective options for the City of Palm Springs,” notes David Freedman, a Palm Springs Sustainability Commissioner. “The online tool really streamlined the process for me and saved me a tremendous amount of work in developing a Reach Codes proposal for consideration by the Commission and our City Council.”

The new version of the Cost-Effectiveness Explorer is available now, with additional functionality coming online over the next several weeks. For technical questions or suggestions, please contact Eric Engelman.

UPCOMING EVENTS

May

May 5: Residential New Construction Compliance – What to Check for (webinar); BayREN

May 7: NAR Green Designation training (webinar); BayREN.

May 12: Energy Commission Business Meeting

May 19: Residential Alterations training; BayREN

May 19-20: Tribal Energy Resiliency Conference; California Energy Commission

May 21-22: Municipal Green Building Conference & Expo, USGBC-LA Chapter



Be sure to follow us on Twitter for the latest news and information!

NEW THIS MONTH!



Q&A WITH ELISE WALL: DISCOVERING CALBEM

Elise Wall is a Consultant at 2050 Partners, Inc., where she enjoys the interdisciplinary research and product development efforts inherent in supporting building codes and appliance standards. She serves as program coordinator for the California Building Energy Modeling initiative (CalBEM) in support of simple, elegant building energy modeling solutions that drive low-carbon building design and construction.

Q: CalBEM is new to us, Elise, and perhaps many of our readers. Please tell us a little about the organization.

A: CalBEM (California Building Energy Modeling) is an industry collective hosted by Southern California Edison on behalf of the California Investor-Owned Utilities. We bring together stakeholders from all aspects of the energy modeling, building design, and energy efficiency fields to collaborate on systemic solutions that advance California's climate action goals. Our Working Groups focus on three core goals:

- **Streamline & Simplify Processes:** Provide a statewide framework that allows fewer energy models to be used for informing energy design decisions, compliance with statewide Building Energy Standards as well as local Reach Codes, and public customer incentive programs and certifications.

- **Educate Users & Develop Resources:** Enhance shared resources for the energy modeling community of technical users and agencies, including developing robust methods and documentation for compliance with codes, incentives, and state programs.
- **Improve Capabilities & Accuracy:** Accelerate the introduction of new simulation capabilities into BEM tools while increasing simulation accuracy.

Q: How long has CalBEM been working on these goals?

A: We're a young organization, organized late in 2017. We strive to be a stakeholder-led effort. With three dedicated Working Groups, we're tackling a range of challenges related to improved modeling processes, educating relevant populations about the BEM tools available, and enhancing the actual modeling tools.

Q: What are the ways local jurisdiction staff or reach code policy developers can participate in CalBEM?

A: We are eager to learn more about how our efforts to improve or enhance modeling tools can serve stakeholders working in the reach code space. For instance, new technologies, such as smart glass or advanced heat pump technologies, that may be important for reach code measures, may not be well-represented in modeling software and consequently difficult to acquire accurate cost-effectiveness data on. If there is a lack of functionality in modeling software for assessing cost-effectiveness in emerging technologies, CalBEM is the forum to find a solution. We want to provide proactive solutions too; for example, could building energy modeling support climate action plans?

We would welcome local jurisdiction staff to participate in our Working Groups, providing specific feedback on projects. We also welcome participation at our annual statewide symposium, typically held in the fall. Stakeholders or interested individuals can download materials from past events here.

To find out more about CalBEM, please visit our website and sign up for our mailing list, or email me at elisewall@2050partners.com.



PALO ALTO ENRICHES ITS SUSTAINABILITY LEGACY WITH NEW REACH CODES

The Statewide Reach Codes program hosted a panel discussion at the 19th Annual Municipal Green Building Conference & Expo, held virtually on August 21-22, 2020. Held by the Los Angeles chapter of the USGBC,

Palo Alto has long used reach codes as a strategy for achieving its climate action and sustainability goals; the city has adopted reach codes in the past three code cycles, since 2008. Doing the same for the 2019 California ENergy Code (Title 24) was no exception. Notes recently retired Assistant Chief Building Official Evon Ballash, “Palo Alto has committed to several bold climate action goals, including increasing building energy efficiency. Our reach code adoption efforts even in the pandemic continue to help us move forward toward these goals.”

The city adopted a Sustainability Implementation Plan in 2018 to reach its climate action goals. As part of this effort, stakeholders and community groups met regularly to discuss action areas and ultimately, draft ordinance language. Initially, this approach was to offer two pathways: an all-electric path and a second path with a mixed-fuel design and increased efficiencies. When City Council reviewed the recommendations in the winter of 2019, the public response at the Council hearing was overwhelmingly in favor of the all-electric pathway.

The City moved forward in a two-phased approach. The first phase, with an effective date of April 1, 2020 requires all-electric for new single-family and low-rise residential construction with two pathways for all other new construction. The second phase, still in progress, will extend the all-electric requirement to all new construction and accessory dwelling units (ADUs).

Phase 1 provisions:

Low-Rise Residential (including Multi-Family Building with 3-stories or less):

- All-Electric Design with electric appliances and no gas appliances. The building is to comply with Title 24 California Energy Code with no additional efficiencies, with the exception of accessory dwelling units (ADU's)

Non-Residential:

- All-Electric Design with all-electric appliances and no gas appliances allowed. The building is to comply with Title 24 California Energy Code with no additional efficiencies; OR
- Mixed-fuel building with gas and electric appliances that complies with Title 24 California Energy Code with increased efficiencies

In reflecting on the implementation, Ballash observed, "the shelter-in-place orders went into effect on March 16, just two weeks before the new code's effective date. There was a lot of uncertainty on both sides of the process, with applicants and staff."

The city prioritized creation of a new online permitting system, complete with forms, checklists, and instructional guides and videos.

Download the City of Palo Alto Frontrunner here.



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.

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OTHER REACH CODE NEWS BRIEFS

October 2026 September 2026 August 2026

Archives