REACH CODE NEWS BRIEF: FEBRUARY 2021 NEWS BRIEF

NEW COST-EFFECTIVENESS REPORTS NOW AVAILABLE





The statewide Reach Codes program is releasing two new cost-effectiveness reports to supplement the library of existing reports for reach code development tied to the 2019 Building Energy Code.

Cost-effectiveness reports such as these are a critical resource for local jurisdictions in the reach code development process, as these cities and counties must demonstrate that the requirements of their proposed measures are cost-effective and will result in buildings consuming less energy than is permitted by Title 24.

The new reports, available at no cost, focus on:

- Existing Single Family Residential Building Upgrades. Read more about this report below.
- 2020 Analysis of High-Rise Residential New Construction. For more information about this report, please refer to the story below.

UPCOMING EVENTS

March 10: Spring Plenary, California Water Efficiency Partnership (CalWEP)

March 17: Energy Commission Business Meeting

March 15, 17, 19: Public Works Officers Institute & Expo, League of California Cities

March 18: Responding to Climate Challenges: Energy Efficient Homes in a Wildfire-prone Region, BayREN Regional Forum

March 24: HPWH Training for Contractors, BayREN

March 25: Getting to Zero: Buildings Case Study Jam, New Buildings Institute

March 25-26: This Way to Sustainability Conference, CSU, Chico



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

NEW THIS MONTH!



PREVIEW: 2020 ANALYSIS OF HIGH-RISE RESIDENTIAL NEW CONSTRUCTION COST-EFFECTIVENESS STUDY

This study focuses on new high-rise (eight stories and higher) multifamily residential construction. The analysis evaluates both mixed-fuel and all-electric residential construction, documenting performance requirements that can be met by either type of building design.

For this analysis, the research team used new prototype designs developed by the Energy Commission. These were recently developed to more closely reflect typical designs for new multifamily buildings across the state. The new high-rise multifamily prototype, which is a variation of the previous ten-story high-rise prototype used in prior code cycles, is a ten-story building with two below-grade parking levels, ground floor commercial space, and nine stories of residential space.

Report analysis includes individual energy efficiency, fuel substitution, and renewable measures and package options. Compliance package options and cost-effectiveness analysis in all 16 California climate zones (CZs) are presented.

This analysis complements the analysis conducted for mid-rise multifamily residential construction in June 2020.

This report can be downloaded here.

Photo by Ralph (Ravi) Kayden on Unsplash.



AT-A-GLANCE: EXISTING SINGLE FAMILY RESIDENTIAL BUILDING UPGRADES COST-EFFECTIVENESS STUDY

This study focuses on requiring upgrades to existing single-family buildings which could be triggered when a remodel is submitted for permit.

For this analysis, an existing home prototype developed by the Energy Commission was used with a few revisions. The original prototype includes an existing 1,440 ft^2 space and a 225 ft^2 addition. For this analysis, the entire 1,665 ft^2 was evaluated as existing space and features were applied consistently across the entire building.

The study includes three unique building vintages: pre-1978, 1978-1991, and 1992-2005, based upon typical envelope and mechanical systems from each period.

The analysis includes scenarios of individual efficiency measures, efficiency packages, fuel substitution/electrification measures and renewables and storage options.

Cost-effective options based on the existing conditions of the building in all sixteen California Climate Zones are identified for each measure and package across the three vintages in comprehensive, easy-to-read tables.

The report is available here.

Photo by Gustavo Zambelli on Unsplash.



FRONTRUNNER: SANTA MONICA EMBRACES WATER NEUTRALITY GOALS

Recognizing that water conservation is increasingly important in an environment prone to regular drought, increased average daily temperatures and devastating wildland-urban interface fires, the City of Santa Monica adopted ambitious water efficiency goals intended to achieve water self-sufficiency by 2023. In fact, water self-sufficiency is one of the four primary aspects of the City's Climate Action Plan and is also linked to the City's greenhouse gas emission reduction goals.

The City identified Water Neutrality (WN) as a water conservation tool that eliminates, or "neutralizes", the impact of building development on the City's overall water demand. In other words, WN allows development to occur without increasing the amount of water used City-wide.

Santa Monica took its first steps toward achieving water neutrality with the passage of an ordinance in May 2017 that became effective in July 2017. The ordinance was modified in early 2019 to broaden the measure's applicability as well as to incentivize affordable housing development.

Applicants that are required to offset water use have two options for compliance. They may offset new water demand by installing water-efficient fixtures and systems or by paying an in-lieu fee that directly funds the City's Water Neutrality Direct Install Program.

Offsets continue to fund the City's Direct Install Program, with more than 5,000 high-efficiency fixtures installed for a total estimated water offset/saved to date: 24.5 million gallons/year (or 75.4 acre-feet/year (AFY) since the program began.

Read the complete Frontrunner here.

Photo by Gerson Repreza on Unsplash.

OTHER REACH CODE NEWS BRIEFS

October 2026 September 2026 August 2026
Archives