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REACH CODE NEWS BRIEF: AUGUST 2024

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NEW ONLINE RESOURCE HUB FOR CALGREEN



The Statewide Local Energy Codes team, in collaboration with the California Building Standards Commission (CBSC), the California Division of the State Architect (DSA)and AIA California, is proud to announce the launch of CALGreenInfo.com, a new web portal offering a variety of CALGreen resources all in one place.

This website comes online during the 15th anniversary of CALGreen, a milestone being celebrated by CBSC all year. "CBSC is proud of its efforts and accomplishments in developing sustainable building regulations that improve the quality of life in the state now and into the future," said CBSC Supervising Architect Irina Brauzman. "We're pleased to participate in the development of this online resource that complements the CALGreen guide published by CBSC. CALGreenInfo.com will serve as a singular landing page for CALGreen educational materials relative to embodied carbon reduction, electric vehicle charging, and other "green" regulations now and in the future as additional sustainable regulations are developed and adopted."

Key collaborators worked for weeks to gather resources and develop a user-friendly website as a free repository.

Says Dave Intner, AIA, of Southern California Edison, and member of the Statewide Codes and Standards team, "Practitioners struggling to understand and comply with new standards or regulations often just need a clear starting point and a roadmap to get them on the right track. The intention of the CALGreeninfo.com resource is to serve as a resource repository that makes navigating the code requirements much easier and more approachable."

This online hub provides a single location for resources that support CALGreen compliance, starting with key fact sheets and tools to help building professionals understand and comply with new requirements related to Electric Vehicles and Embodied Carbon that emerged in the intervening code cycle and became effective as of July 1, 2024.

Noting that this effort was the result of collaboration between public and private agencies, Michael Malinowski FAIA, Consultant with AIA California reflected, "CALGreenInfo.com is a great example of how we can advance knowledge, the practice of architecture, and climate action by engaging with our collaborators to leverage the many resources and efforts of teams working in this policy space. None of us have to do it all ourselves! Collaboratively, we've created a living resource that will provide information and guidance to design and building professionals across California and beyond. "

This resource provides tools, links, educational offerings, and more. We look forward to continuing to enhance this hub and to sharing these resources with building and sustainability professionals across California and beyond.

Visit CALGreenInfo.com today!

UPCOMING EVENTS

September 10: BayREN Forum: Heat Pump Water Heater Permitting: Preparing for a Decarbonized Future. San Francisco.

September 11: California Energy Commission Business Meeting

September 11: Reach Codes webinar: 2024 Updates to the 2022 Single Family Retrofits Cost-Effectiveness Study

September 11: New Buildings Institute webinar: Industrial Heat Pumps: Manufacturer's Roundtable

September 12: 3C-REN webinar. All-Electric Accessory Dwelling Units (ADUs)

September 16-20: Net Zero Buildings Week

September 17-18: Net Zero Conference. Anaheim.

September 18: I-REN Forum: Revitalizing the Past: Energy Efficient Retrofits for Historic Buildings



NEW THIS MONTH!



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) ADOPTS NEW ZERO NOX RULES

In a nine to one vote on June 7, 2024, (agenda, live Webcast) the Governing Board of the South Coast Air Quality Management District (SCAQMD) adopted significant amendments to its Rule 1146.2 which was originally established in 1988 and regulates the nitrogen oxide (NOx) emissions of large water heaters, small boilers, and process heaters. South Coast AQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange, Riverside and San Bernardino counties, including the Coachella Valley.

The revised rule mandates that all the covered equipment must emit zero NOx emissions by the given compliance dates for new construction and for equipment replacements in existing buildings. The revisions help fulfill SCAQMD's commitment in its 2022 Air Quality Management Plan (AQMP) to introduce zero-emission technologies across all sectors to meet air pollution standards and applies to units with capacities of 75,000 Btu/hr to two million Btu/hr. Currently, electric appliances are the only commercially available technologies that meet zero NOx standards for space and water heating.

Implementation and Compliance Timeframes

The proposal takes a phased approach toward implementing the zero-NOx requirements, requiring all new buildings to comply first with later compliance dates for existing buildings and varied deadlines based on the type of facility and the availability of the zero-NOx retrofit equipment required. For example:

- Smaller units[1] for which replacement equipment is readily commercially available, new buildings must comply beginning January 1, 2026, in alignment with the primary prescriptive pathway in California Building Energy Efficiency Standards (Title 24, Part 6).
- For existing commercial and industrial buildings, a two-tiered approach requires zero-NOx emission replacements after the compliance date of January 1, 2029, and at the unit's age. For smaller appliances the unit age is 15 years and for larger units, replacement is required when the unit reaches 25 years.
- For larger units[2] and pool heaters in new and existing commercial and industrial buildings, compliance dates are January 1, 2028, and January 1, 2031, respectively.
- High temperature units[3], such as those commonly used in dry cleaning facilities, have later compliance dates of January 1, 2029, in new buildings and out to January 1, 2033, for existing buildings.
- For existing residential buildings, new units must be zero-emissions after the effective date but are not subject to the age of the unit requirements and therefore can be replaced when the unit naturally expires.

Alignment with Actions from State and Local Agencies

The Bay Area Air Quality Management District (BAAQMD) has already adopted similar rules to eliminate NOx emissions from residential and commercial natural gas furnaces and water heaters, and the California Air Resources Board (CARB) is developing regulations for zero GHG emissions for space and water heating standards. The California Energy Commission will adopt the 2025 Building Energy Efficiency Standards (Title 24, Part 6) effective January 2026. For single-family new construction, their 2025 proposal makes heat pump space heaters and heat pump water heaters or solar water heating systems the primary prescriptive pathway in all climate zones instead of excluding certain climate zones. That strongly steers owners and developers to electric space and water heating equipment since gas equipment would require energy saving measures to offset the additional source energy usage of the gas equipment.

[1] Smaller units are those less than or equal to 400,000 Btu/hr (but excluding pool heaters and excluding water heaters covered by Rule 1121), instantaneous water heaters less than 200,000 Btu/hr

[2] Large units include water heaters greater than 400,000 Btu/hr, instantaneous water heaters greater than 200,000 Btu/hr and up to and including 2,000,000 Btu/hr

[3] High temperature units are designed to produce steam or heat water above 180 degrees Fahrenheit



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