



## REACH CODE NEWS BRIEF: JULY 2020

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## STATEWIDE REACH CODES PROGRAM'S NEW WEBSITE



The statewide reach codes program team launched a robust revised website recently that offers plentiful resources and tools for reach code professionals seeking information. For detailed information about reach code pathways, the website offers an interactive experience for each specific category:

- Building Efficiency/Renewables
- Electric-Ready
- Energy Plus Water
- Information Disclosure
- Process Loads

For general information, the website offers quick reach code information via FAQs as well as its portfolio of Frontrunners and News Briefs.

Visitors can also browse our [website](#) for detailed information about adopted reach codes throughout the state ([map view](#) or the [adopted ordinances list](#)).

## UPCOMING EVENTS

### August

**August 20:** SEEC Forum webinar: Maximizing Value of Resiliency Programs: Case Study & Resources

**August 17-21:** ACEEE Summer Study on Energy Efficiency in Buildings Virtual

**August 21-22:** Municipal Green Building Conference & Expo

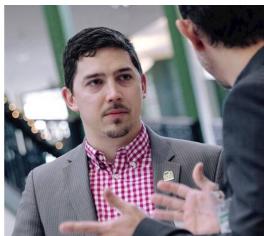
### September

**September 24:** 2020 Virtual Fall Plenary, California Water Efficiency Partnership



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

## NEW THIS MONTH!



## Q&A WITH NEIL MATOUKA: TAPPING INTO CLIMATE ACTION PLANNING RESOURCES FROM CARB AND COOL CALIFORNIA

Neil Matouka has more than 5 years of experience as a green building and district-scale advanced energy professional. Currently, Neil works with the California Air Resources Board as Staff Lead, Local Government Climate Action Planning, focusing on climate action planning and resources and tool development. He also coordinates with local jurisdictions on behalf of [CoolCalifornia.org](#), a program of CARB and its collaborative partners, to help deliver appropriate resources to jurisdictions implementing and managing effective climate action plans (CAP).

### Q: Tell us a little about the goals of Cool California, Neil.

A: [CoolCalifornia.org](#) was founded in 2009 by CARB, Berkeley's Renewable and Appropriate Energy Laboratory, and Next10, a nonprofit organization, as a one-stop shop for all Californians, offering quick, easy-to-use and reliable tools that all Californians need to save money and reduce their impact on the climate. The organization offers resources for households, local governments, schools and small businesses, with a range of toolkits and information for each sector.

### Q: What are some of the resources available for reach code professionals?

A: For local governments, the range of resources is very comprehensive, starting with the state [CAP-Map](#). This interactive tool offers a snapshot of every California jurisdiction, with links to their respective Climate Action Plans, greenhouse gas (GHG) reduction targets, and specific strategies for achieving those GHG targets. With this tool, planners can easily locate similar jurisdictions, view existing plans and strategies, and identify some strategies that might be new to them. Having easy access to a wide range of CAPs and strategic approaches can provide a time-saving yet comprehensive deep dive of the wide range of options available.

In addition to the CAP-Map, there are model strategies and links to reports, such as feasibility studies on Zero-Carbon Buildings and Communities in California, Research on Land Use and Transportation Planning, a Report on the State of Climate Action Plans in California, and more.

We've also developed a [Funding Wizard](#) that users can utilize to identify grants, rebates and other funding incentives for program development. Users can set filters by funding type, category, eligible applicants or with keywords to locate specific opportunities. We're hoping to launch an updated version of the Funding Wizard tool by the end of 2020 with improved search functionality and more funding opportunities.

## NOW AVAILABLE! NEW COST-EFFECTIVENESS STUDY FOR MID-RISE CONSTRUCTION



The statewide Reach Codes Program recently published its newest cost-effectiveness study for the 2019 Building Energy Standards cycle.

This report documents cost-effective combinations of measures that exceed the minimum state requirements for new mid-rise (four- to seven-story) multifamily residential construction. This profile is typically a commercial occupancy on the first floor with residences above. Many jurisdictions have identified that building affordable multifamily housing with similar profiles is a high priority to begin alleviating the housing shortage across the state.

The Energy Commission recently developed updated prototype models to better reflect the current building styles for multifamily projects. The mid-rise multifamily prototype used in this analysis is a 6-story building with one below-grade parking level, ground floor commercial space, and four stories of residential space.

The analysis includes evaluation of both mixed-fuel and all-electric residential construction, documenting that the performance requirements can be met by either type of building design. The report presents compliance package options and cost-effectiveness analysis in all 16 California climate zones (CZs).

Four packages were evaluated for each climate zone:

### 1) Efficiency – Mixed-fuel:

This package applies efficiency measures that don't trigger federal preemption including envelope, water heating distribution, and duct distribution efficiency measures.

### 2) Efficiency – All Electric:

This package applies efficiency measures that don't trigger federal preemption in addition to converting any natural gas appliances to electric appliances. For the residential spaces, only water heating is converted from natural gas to electric.

**3) Efficiency & PV – Mixed-fuel:** Beginning with the Efficiency Package, PV was added to offset a portion of the apartment estimated electricity use.

**4) Efficiency & PV – All Electric:** Beginning with the Efficiency Package, PV was added to offset a portion of the apartment estimated electricity use.

The analysis found cost-effective packages across the state. For the building designs and climate zones where cost-effective packages were identified, the results of this analysis can



## CITY OF DAVIS ADVANCES 40-YEAR SUSTAINABILITY HISTORY WITH COMPREHENSIVE REACH CODES

Davis, located only 11 miles west of Sacramento, is home to the University of California-Davis, which has forged an international reputation as a leader in veterinary medicine and animal husbandry. With nearly 70,000 residents, the city is also well-known for embracing sustainability and a green lifestyle, with well-known and highly-respected bicycle-friendly infrastructure and a long history of energy efficiency and sustainability spanning four decades. The city adopted its first Energy Conservation Building Code in 1972, which eventually was the basis for California's Title 24 requirements and Energy Code.

The City sustainability staff focused on developing and implementing its current package of reach codes to extend these codes beyond the statewide 2019 Building Energy Efficiency Standards and help the City achieve aggressive new goals. In March 2019, the City Council approved a Resolution declaring a climate emergency and proposed mobilization efforts to restore a safe climate that included an acceleration of the carbon neutrality goal for the Davis community from 2050 to 2040.

For nonresidential and high-rise residential construction, the City adopted a set of provisions focusing on holistic approaches like those found in building rating systems such as LEED (Leadership in Energy and Environmental Design) as well as CALGreen (Title 24 Part 11), the 2019 Building Energy Efficiency Standard (Title 24 Part 6) and the Davis Municipal Code. "By developing a set of measures that essentially requires new construction to achieve this holistic level of compliance, the result is a LEED Gold equivalency," notes Greg Mahoney, Assistant Director, Community Development & Sustainability.

Later in 2019, the City team turned its focus to primarily residential construction. Mahoney noted, "for residential construction, we recognized the opportunity to incentivize all-electric homes while still providing a compliance pathway for mixed-fuel use. We did this by requiring no additional provisions for all-electric homes while adding requirements for mixed-fuel construction."

"We anticipate the implementation of these new reach codes to be highly effective," Mahoney observed. "The city enjoys community-wide support of its sustainability efforts and is committed to achieving its long-term climate goals."

Read the complete Frontrunner [here](#).

**Q: From your perspective, what are the greatest obstacles local governments face in tackling climate action plans and reach code development?**

A: Historically, we've seen that staff capacity and funding have been constant challenges. Other significant challenges have been in the area of consensus and community building that involves wide and disparate sets of stakeholders. Today and going forward, especially in this COVID era, these will remain significant obstacles. The fact that these continue to be the most significant challenges speaks to the value of statewide programs such as CoolCalifornia.org and the statewide Reach Code program. These organizations can provide robust and highly cost-effective tools for local jurisdictions to tap into, resources that do not require additional investment on the part of the local staff.

be used by local jurisdictions to support the adoption of reach codes.

The study is available at no cost [here](#).

**Q: Any closing thoughts?**

A: We encourage local staff to visit our website at [CoolCalifornia.org](#) to explore the range of resources. Download an overview of CoolCalifornia.org programs and resources [here](#). There are also additional CARB research studies on sustainable land use and green buildings on the [CARB website](#).



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