

## REACH CODE NEWS BRIEF: DECEMBER 2019

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## 2019'S "YEAR OF REACH CODES" CONCLUDES ON A HIGH NOTE



Earlier this month, six jurisdictions that had adopted reach code packages received California Energy Commission approval of their local codes:

- City of Menlo Park
- City of San Jose
- City of San Mateo
- City of Santa Monica
- City of West Hollywood
- County of Marin

These jurisdictions join a host of other communities that have implemented local provisions that go beyond Title 24-2019. For instance, the City of Carlsbad adopted a comprehensive suite of provisions; read the highlights below and the complete [Reach Code Frontrunner](#) on our website.

A complete matrix of adoption activities is available [here](#). It is updated regularly due to the rapidly changing state of reach code activities.

## Q&A WITH BRIAN SELBY: HOW CEAS CAN HELP LOCAL JURISDICTIONS WITH REACH CODE IMPLEMENTATION

*Brian is a Principal at Selby Energy, Inc., where his primary role is developing and delivering energy code training for Energy Codes Ace Title 24 Essentials courses. He has over 30 years' experience as an energy consultant. He is an Energy Code subject matter expert and interacts with the California Energy Commission (CEC), Investor Owned Utilities (IOUs), association professionals and other industry stakeholders to foster education, promotion, and compliance with the California Building Energy Efficiency Standards.*



**Q: First off, Brian, please tell us a little about what a CEA actually is and does?**

A: Sure, a Certified Energy Analyst is an energy consultant who has demonstrated proficiency in five core areas of knowledge:

1. Knowledge of energy efficiency concepts, such as heat transfer, residential energy design measures, and how they relate to building energy performance metrics and code compliance
2. Understanding of energy code triggers and determining how to apply the code for compliance
3. Skill at gathering and organizing project-specific information for energy modeling, known as take-offs, used to develop compliance documentation
4. Skill in accurately analyzing building performance and troubleshooting compliance results
5. Ability to identify opportunities to meet or exceed code requirements

**Q: Where do you see the most impactful opportunities for CEAs in reach code implementation?**

A: Perhaps the biggest potential benefit for local jurisdictions to incentivize use of CEAs in reach codes is the confidence instilled in the accuracy of the compliance documentation. Our research indicates a significant improvement in accuracy when evaluating CEA-developed compliance documentation compared with documentation prepared by others.

**Q: Is there a benefit to builders or is the only benefit to local government?**

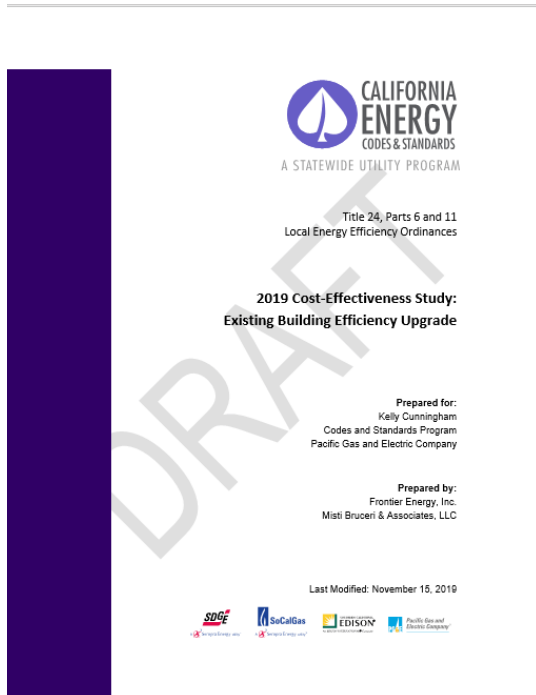
A: Definitely, having this confidence in compliance helps streamline the plan check process at the local level and minimizes risk of unforeseen project costs or delays later in the process, at time of interim or final inspections.

**Q: Are any current reach codes requiring the use of CEAs?**

A: I believe some of the most newly-approved codes, City of San Jose and Santa Monica, contain provisions either requiring CEAs to prepare compliance documentation or providing incentives when CEAs are used.

**Q: How does a stakeholder find out more about CEAs?**

A: There is a lot of information available from the [California Association of Building Energy Consultants \(CABEC\)](#), the organization that certifies professionals and conducts training and thought leadership events.



## COMING THIS MONTH: NEW COST-EFFECTIVENESS REPORT FOR EXISTING RESIDENTIAL CONSTRUCTION

Scheduled for publication this month, the *2019 Cost-Effectiveness Study*:

*Existing Building Efficiency Upgrade* focuses on cost-effective measures that exceed the state's 2019 Building Energy Efficiency Standards, effective January 1, 2020, for existing single family and low-rise (one- to three-story) multifamily buildings when a remodel is submitted for permit. With the focus on existing residential construction, the report supports the long-term commitment of the state to achieving the energy efficiency targets expressed by SB350 and the Existing Buildings Energy Efficiency Action Plan (EBEE Action Plan) adopted by the California Energy Commission in September 2015.

The analysis includes scenarios of individual measures, as well as package upgrades, and identifies cost-effective options based on the existing conditions of the building in all sixteen California Climate Zones. Both single family and low-rise multifamily cases are considered, for three unique building vintages: pre-1978, 1978-1991, and 1992-2005. These building vintages were evaluated to identify the relationship between existing building performance and the cost-effectiveness of individual or package upgrades. For instance, adding attic insulation in an older home with no existing insulation is far more cost-effective than it would be in a newer home likely to have at least some existing attic insulation. The building characteristics for each vintage were determined based on either prescriptive requirements from the Title 24 code that was in effect or standard construction practice during that time period.

Of course, each jurisdiction would establish the appropriate threshold for triggering the requirements, perhaps based on project value or

## CITY OF CARLSBAD BECOMES FIRST CALIFORNIA CITY TO ADOPT 2019 ENERGY REACH CODES

In 2015, Carlsbad adopted a comprehensive General Plan update, including an ambitious Climate Action Plan (CAP), which aims to reduce emissions of greenhouse gases such as carbon dioxide, methane, nitrous oxide and water vapor. Over the past few years, City officials studied a variety of experiences and options for implementation. Early in 2019, the City Environmental Management and Planning Departments proposed a package of ordinances to fulfill the promise of the City's CAP.

Each of the approved ordinances focuses on a specific aspect identified in the City's CAP, related to energy efficiency, renewable energy, alternative water heating and electric vehicle charging infrastructure.

### **Energy Efficiency Provisions**

Residential efficiency provisions apply to renovations of existing single-family and multi-family residential buildings with permit valuations of \$60,000 or more. Nonresidential efficiency provisions apply to all new construction and major renovations adding more than 1,000 ft<sup>2</sup> of floor area or with a building permit valuation of \$200,000 or more.

### **Photovoltaic (PV) Energy Provisions**

This provision mandates inclusion of cost-effective PV systems in all new nonresidential construction and major renovations with building permit valuations of \$1,000,000 or more that affect 75 percent or more of the existing floor area.

### **Water Heating Provisions**

This provision requires the inclusion of cost-effective energy-efficient electric water heaters and/or solar thermal water heating systems in all

percent of floor area impacted. Alternatively, a jurisdiction could require the energy efficiency upgrades upon the sale of a home.

The statewide Reach Codes team expects to publish the report before year end. Interested jurisdictions may download it free of charge from [localenergycodes.com](http://localenergycodes.com)

new residential and nonresidential construction.

#### ***Electric Vehicle (EV) Ordinance***

This ordinance requires the inclusion of EV charging infrastructure in residential and nonresidential new construction and major renovations. It also applies to major residential renovations that meet specific criteria.

Read the complete [Frontrunner](#) on [localenergycodes.com](http://localenergycodes.com).

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