

**DOCKETED**

<b>Docket Number:</b>	22-DECARB-02
<b>Project Title:</b>	Building Decarbonization and Electric Vehicle Charging Equipment Web Guide
<b>TN #:</b>	244390
<b>Document Title:</b>	PG&E Comments on the Building Decarbonization and Electric Vehicle Charging Equipment Web Guide
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*Comment Received From: PG&E  
Submitted On: 8/9/2022  
Docket Number: 22-DECARB-02*

**PG&E Comments on the Building Decarbonization and Electric Vehicle Charging Equipment Web Guide**

*Additional submitted attachment is included below.*


August 9, 2022

California Energy Commission  
Dockets Office, MS-4  
Re: Docket Number 22-DECARB-02  
715 P Street  
Sacramento, CA 95814-5504  
[Docket@energy.ca.gov](mailto:Docket@energy.ca.gov)

**RE: Pacific Gas & Electric Comments on the Building Decarbonization and Electric Vehicle Charging Equipment Web Guide (Docket Number 22-DECARB-02)**

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide recommendations concerning the content of the new building decarbonization and electric vehicle charging equipment website. PG&E's comments focus on how the California Energy Commission (CEC)'s new website may link to the Codes and Standards Compliance Improvement Subprogram's Energy Code Ace website in order to help industry access existing training, tools and resources that are designed to overcome barriers to building electrification.

The following pages feature illustrative examples of content the CEC may wish to link to on EnergyCodeAce.com.



Our popular resources help facilitate effective implementation of California's building and appliance energy efficiency standards.

**Application Guides**

These short manuals include compliance requirements and recommendations for implementing Title 24, Part 6 in Nonresidential and Residential New Construction, Additions and renovation projects. Guides with building electrification content include:



- Nonresidential Envelope and Solar Ready
- Nonresidential HVAC and Plumbing
- Residential Envelope, Solar Ready and PV
- Residential HVAC and Plumbing

**Fact Sheets**

Our "quick reference" summaries of key requirements, forms, definitions and resources for implementing Title 24, Part 6 and Title 20. Fact sheets with building electrification content include:

- Residential Compliance Pathways 2019
- What's New in 2019 Nonresidential Energy Code
- What's New in 2019 Residential Energy Code
- What's Changed for 2022 – Multifamily Buildings
- What's Changed for 2022 – Nonresidential Buildings
- What's Changed for 2022 – Single-family Residential Buildings
- What's New in 2022 Nonresidential Energy Code
- What's New in 2022 Residential Energy Code
- What's New in 2022 Multifamily Energy Code

Find all our resources at **[EnergyCodeAce.com/Resources](https://EnergyCodeAce.com/Resources)**.

## Online Live: Check our site for upcoming class dates

### 2019 Title 24, Part 6 Essentials – Nonresidential Standards for Architects & Designers

Designed to help nonresidential architects and designers advance their understanding of California's 2019 Energy Code, the course offers a clear roadmap of the compliance process, including how to administer and coordinate with the design team and energy consultant, and it provides guidance on the Energy Code requirements for commissioning and design review, envelope, daylighting and solar ready design. [Learn more here.](#)

### 2019 Title 24, Part 6 Essentials – Residential Standards for Architects & Designers

Designed to help residential architects and designers advance their understanding of California's 2019 Energy Code, the course offers a clear roadmap of the compliance process, including how to administer and coordinate with the design team and energy consultant, and it provides guidance on Energy Code requirements for envelope, mechanical and photovoltaic (solar) design. [Learn more here.](#)

### 2022 Title 24, Part 6 Essentials – Nonresidential Standards: What's New

Summarizes the new and revised requirements in the 2022 California Energy Code for nonresidential buildings, and directs participants to informational and training resources that provide more in-depth information on the Energy Code. [Learn more here.](#)

### 2022 Title 24, Part 6 Essentials – Residential Standards: What's New

Summarizes the new and revised requirements in the 2022 California Energy Code for residential buildings, and directs participants to information and training resources that provide more in-depth information on the Energy Code. [Learn more here.](#)

## Code Breakers: Contact us to schedule

### Code Breaker: Single Family All Electric – 2022 Energy Code

Reviews not only the all-electric preparation requirements of the 2022 Energy Code, but also PV exemptions. The presentation also explores preparation for future all-electric buildings in the Energy Code requirements for heat pump space heating, domestic hot water and battery-ready electrical panel configuration. [Learn more here.](#)

### Code Breaker: Multifamily All Electric – 2022 Energy Code

Reviews not only the all-electric preparation requirements of the 2022 Energy Code, but also PV exemptions. The presentation also explores preparation for future all-electric buildings in the Energy Code requirements for HVAC systems, domestic hot water and battery storage. [Learn more here.](#)

### Code Breaker: Nonresidential All Electric – 2022 Energy Code

Reviews not only the all-electric preparation requirements of the 2022 Energy Code, but also PV exemptions. The presentation also explores preparation for future all-electric buildings in the Energy Code requirements for HVAC systems, domestic hot water and battery storage. [Learn more here.](#)

## On-demand: Available online at your convenience

### Code & Coffee: Modeling Residential PV Systems for the 2019 Energy Code using EnergyPro8

Focuses on residential building performance modeling for compliance with California's 2019 Energy Code. The host demonstrates how to model detailed PV system inputs for a single-family residential project. [Watch the video here.](#)

### Code & Coffee: Residential Modeling – 2019 Energy Code New Construction Project

Demonstrates how to update an existing 2016 Energy Code new construction model for compliance with the 2019 Energy Code using EnergyPro version 8. Key topics include adding a solar PV system and battery storage, updating envelope, HVAC and DWH system measures, reviewing the new EDR compliance metric and checking the CF1R for accuracy. [Watch the video here.](#)

### 2019 Residential Modeling – Heat Pump Water Heaters Serving Single Dwellings

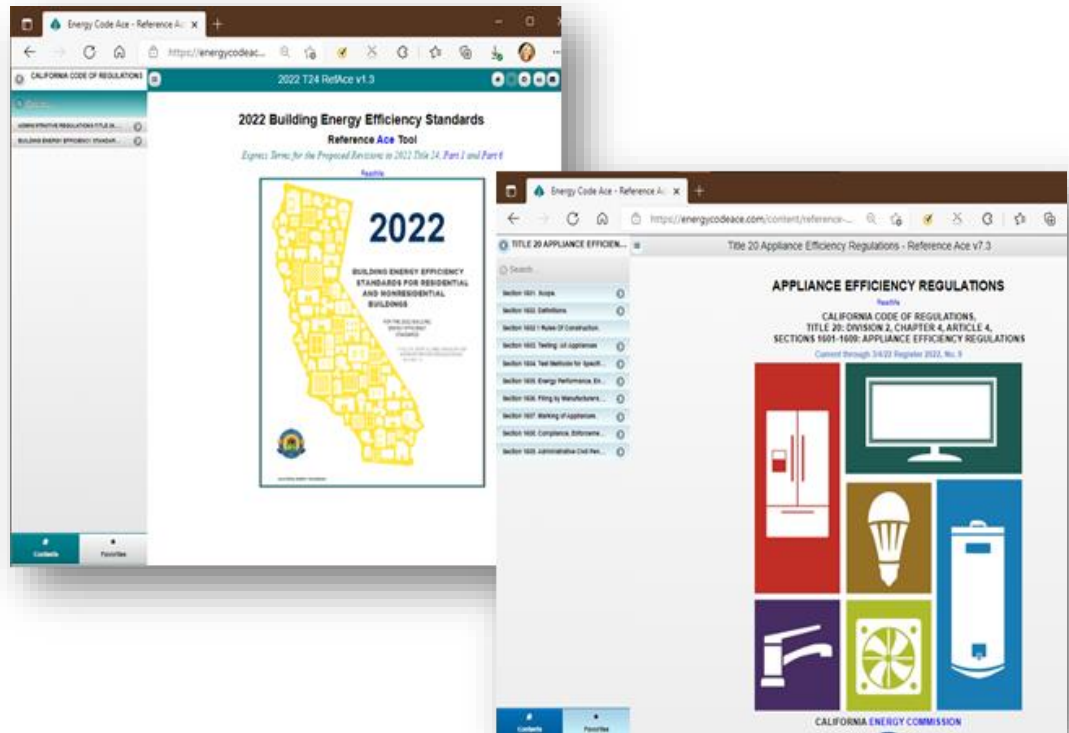
Provides an overview of considerations for simple heat pump water heater systems and demonstrates how to model such systems in both EnergyPro and CBECC-Res software packages. [Watch the video here.](#)



### Reference Ace

helps industry quickly navigate the code language and appendices.

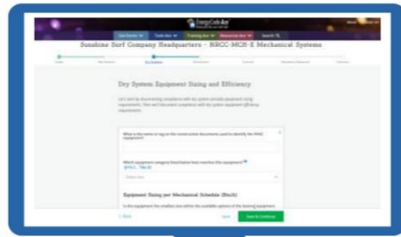
Notice the Reference Ace includes both Title 24, Part 6 and Title 20 standards documents.



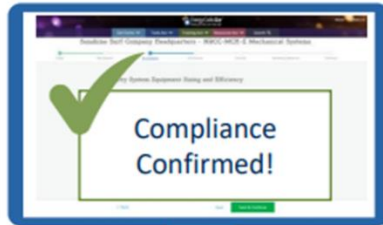
### Virtual Compliance Assistant

can ease identifying code requirements, verifying compliance and completing forms for all types of nonresidential projects.

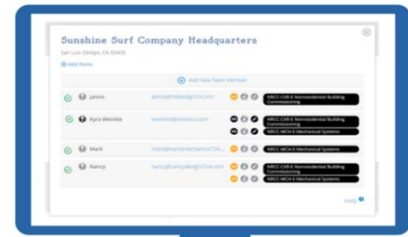
This tool verifies compliance and generates forms that indicate when a project does and doesn't comply *before* the permit application arrives at the permit counter. It also auto populates certificates of installation with permitted project data, saving the installer time and indicates if field substitutions are equal or better than what was permitted. This saves designers and installers time on change orders and should streamline inspections. Schemas may be used by other entities who have tools that automate tasks and these schemas will lead to consistent as-designed vs. as-built project data that may be captured in a central repository.



**Only applicable  
questions**



**Real time compliance  
status**



**Online team  
coordination**



**Generates completed  
form**



## Energy Code Product Finder

identifies certified products and other product requirements for a specific project scope and provides example specification language to help designers reflect Title 24, Part 6 and Title 20 product requirements in construction documents.

The tool also provides links to referenced product databases, such as the Cool Roof Rating Council (CRRC) or National Fenestration Rating Council (NFRC) websites.

## Energy Code Product Finder

We can help find Title 24, Part 6 compliant products. Using the buttons below, just let us know which parts of the project you are working on or, if you already have a [Construction Specifications Institute \(CSI\) MasterFormat®](#) Number, you can choose that instead.

Building Component	CSI Number	Show All
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▼ Tell me more about requirements

*OK, start by answering a few questions about the parts of your project you need product info for so we can determine applicable product requirements.*

1. What is your project's occupancy type?

Residential ▼

2. Which applications do you want to check for certified projects?

Electric Distribution Systems, Envelope, HVAC (conditioned), Lighting & 3 more ▼

3. What is the project ZIP Code? ⓘ

93304

## Energy Code Product Finder

Title 24, Part 6 Compliant Products

Search for a product type or specification number



Save Results

PRODUCT	CODE SECTION	BLDG OCCUPANCY	CSI NUMBERS & EXAMPLE PRODUCT SPECIFICATION LANGUAGE	PRODUCT DATABASE
ENVELOPE				
Daylighting Requirements	2019 Energy Code (Current) §110.6(a)4: VT §140.3(c)5: Haze	Single Family	CSI Numbers: 08 06 00 Schedules for Openings 08 60 00 Roof Windows and Skylights  Want pro designer tips for specifying these products in your construction documents?  <a href="#">Show Example</a> ▼	National Fenestration Rating Council
Exterior Doors	2019 Energy Code (Current) §110.6(a)1	Single Family	CSI Numbers: 08 10 00 Doors and Frames  Want pro designer tips for specifying these products in your construction documents?  <a href="#">Show Example</a> ▼	No database or list available. Refer to product documentation to confirm certification.
Fenestration (Window/Skylight/Glazed Door)	2019 Energy Code (Current) §110.6(a)1: Air Leakage §110.6(a)2: U-factor §110.6(a)3: SHGC §110.6(a)4: VT	Single Family	CSI Numbers: 08 50 00 Windows  Want pro designer tips for specifying these products in your construction documents?  <a href="#">Show Example</a> ▼	National Fenestration Rating Council
Insulation	2019 Energy Code (Current) §110.8(a)	Single Family	CSI Numbers: 07 21 00 Thermal Insulation  Want pro designer tips for specifying these products in your construction documents?  <a href="#">Show Example</a> ▼	Bureau of Household Goods and Services



Assist local jurisdictions with adopting local ordinances through the Codes and Standards Reach Code Subprogram	The IOUs can equip jurisdictions with the tools and information they need to pursue local energy ordinances that help achieve higher efficiency than minimum code requires, and spur the adoption of PV systems, electrification measures and more. Please see <a href="http://www.LocalEnergyCodes.com">www.LocalEnergyCodes.com</a> for more information.
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PG&E appreciates the CEC for its on-going collaboration. We look forward to continued dialogue and learning how we can support the new building decarbonization website.

Sincerely,

/s/

Mark Krausse  
 Director, State Agency Relations