

**Draft ENERGY STAR Residential New Construction Program Requirements for California, Single-Family New Homes
Version 3.3 / Multifamily New Construction Version 1.3 and Extension of Home Certification Organization (HCO)
Oversight to California Comments**

This is a compilation of all comments received by EPA during the Draft ENERGY STAR Residential New Construction Program Requirements for California, Single-Family New Homes Version 3.3 / Multifamily New Construction Version 1.3 and Extension of Home Certification Organization (HCO) Oversight to California comment period.

The following comments have been compiled from the ENERGY STAR Program Requirements for California, SFNH Version 3.3 / MFNC Version 1.3 and Extension of HCO Oversight Stakeholder Comment Form submitted by respondents. The Environmental Protection Agency is not responsible for any typographical errors or omissions.



ENERGY STAR Residential New Construction Roadmap Comments

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ENERGY STAR Residential New Construction Roadmap Comments

Organization Name: Arcxis

Respondent Last Name: Blythe

Respondent First Name: Elizabeth

Comments:

Hello,

Thank you very much for the presentation. On behalf of ARCXIS/EI in California, We have coordinated internally and externally and agree on the following:

- Agree with the new versions for CA (3.3 SFNH & 1.3 MFNC).
- Agree with the timeline for implementation.
- Agree with the two options for achieving the performance target.
- We do advocate against adding the updated thermal backstop in CA.

Reason: CA software does not perform this calculation today like in IECC states. CA has some unique construction techniques (e.g. hybrid, high performance attics) that are not easily modeled in other software to get to a total building UA value. CEC has sufficiently stringent thermal envelope requirements that the Energy Star thermal backstop is not necessary. Thus, the cost to provide accurate documentation of the national thermal backstop is will be high but any benefit would be minimal as CEC thermal envelope requirements are likely to exceed the national Energy Star thermal backstop.

- Agree with Energy Star registration via a HCO, but only if both CalCERTS and CHEERS become HCOs or
- operate under an HCO such as RESNET. This would allow homes to be registered with a single entity and not
- requiring dual registration (e.g. one for CEC code compliance and a 2nd for Energy Star HCO compliance).

Please let me know if there are any questions or concerns.

Thanks again.

ELIZABETH BLYTHE, LEED AP

Vice President California

c: (760) 317-7871 o: (951) 251-0136

eblythe@eicompanies.com

16880 W Bernardo Drive, Suite 120, San Diego, CA 92127

arcxis.com | vCard | map

ARCXIS

*Formerly DPIS Builder Services, Ei Companies, Post-Tension Solutions,
Ensign Building Solutions Home Energy Division & Building Energy*



ENERGY STAR Residential New Construction Roadmap Comments

Organization Name: California Energy Commission (CEC)

Respondent Last Name: Hochschild

Respondent First Name: David

Comments:

Comments submitted in letter. See next page.



**CALIFORNIA
ENERGY COMMISSION**



May 3, 2022

Jonathan Passe
U.S. Environmental Protection Agency
1201 Constitution Ave NW
Washington, DC 20004
via energystarhomes@energystar.gov

California Energy Commission's Comments on ENERGY STAR® Proposed California Requirements for Newly Constructed Homes

Dear Jonathan Passe:

The California Energy Commission (CEC) is the primary energy policy and planning agency for the State of California. The CEC is also responsible for California's energy code through Title 24 part 6, strategic planning for the reduction of GHG emissions in buildings, and the implementation of several new construction incentive programs that target decarbonization. The CEC appreciates the opportunity to comment on ENERGY STAR's proposed revisions to its single-family and multifamily specifications and the commitment to keeping the program relevant toward driving market transformation to a clean energy future.

However, driving the specification based on the 2019 code alone would cause the program to lag state baseline requirements. The ENERGY STAR specification is proposed to take effect on January 1, 2023, which is the same time at which California's 2022 code becomes effective. Beyond the statewide code, California is home to over 40 jurisdictions with their own local requirements.¹ All of these code developments have driven the market further toward efficient, all-electric appliances. The CEC requests ENERGY STAR strongly consider adding criteria to both the single-family and multifamily programs requiring efficient electric appliances.

The CEC is administering over \$100 million in new construction incentives for all-electric new construction,² and the Governor of California's budget proposal for this legislative session includes \$926.4 million in additional public spending on equitable building decarbonization.³ California is looking for precisely the type of

¹ [Local Ordinance Exceeding the 2019 Energy Code](#)

² California Electric Homes Program (Cal EHP) and BUILD program.

³ [Budget Summary \(ca.gov\)](#) see page 92 of 400.

Jonathan Passe
May 3, 2022
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program that ENERGY STAR can provide for all-electric buildings, a well-understood brand for building recognition.⁴ Alignment of ENERGY STAR and incentive requirements would send a cohesive market signal to California builders.

The 2022 Energy Code has moved markedly past the 2019 code's focus on EDR, and the CEC strongly advises ENERGY STAR to update its approach to align with these changes. The changes include the introduction of a second metric required for compliance based on hourly source energy that closely tracks marginal utility emissions and the establishment of performance standards baselines on heat pump technologies. The limited proposed increment above the 2019 TDV EDR would be out-of-step with these changes.

In summary, the CEC recommends ENERGY STAR update its approach to align with the 2022 energy code and modeling with a focus on all-electric construction. This would make ENERGY STAR's program much more effective in California and would be a major opportunity to provide strong national leadership in favor of building decarbonization. The Commission is excited to work with you to promote the market transformation to achieve better, climate-responsive buildings through alignment between our programs. For further questions or discussion please email Ken Rider, Chief Policy Advisor to Chair Hochschild, at Ken.Rider@energy.ca.gov.

Sincerely,



David Hochschild
Chair

⁴ A recent Cal EHP workshop discusses the concept on slides 25-30
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=242371&DocumentContentId=75868>



ENERGY STAR Residential New Construction Roadmap Comments

Organization Name: Natural Resources Defense Council (NRDC)

Respondent Last Name: Urbanek

Respondent First Name: Lauren

Comments:

Definition of California SFNH Version 3.3 and MFNC Version 1.3 Program Requirements

- 1) Do you have feedback on the proposed new performance targets of the ENERGY STAR Single-Family New Homes (SFNH) and Multifamily New Construction (MFNC) Program Requirements for California (i.e., an Efficiency EDR ≥ 3 points, or a Compliance Margin $\geq 10\%$, above the 2019 Building Energy Efficiency Standards)?

Given the latest updates to the 2022 California Title 24 energy code, the ENERGY STAR California SFNH Version 3.3 and MFNC Version 1.3 should require all-electric new construction. The 2022 California code already strongly encourages electrification of single family and multifamily homes by setting a performance standard with a baseline of electric space or water heating, the larger of the two in most climate zones. Combined with the updated source energy metric, this already creates a strong incentive for builders to go all-electric when following the 2022 code. While all-electric construction is not required, it is a relatively easy lift in California given the updated baseline. ENERGY STAR should set a clear direction for new construction to be both efficient and all-electric. A home that meets the proposed ENERGY STAR requirements but uses fossil fuels would be a step backwards from the 2022 California code.

- 2) Because the California code compliance software does not calculate total UA values, which are used to define the backstop in the national program requirements, and enforcing the backstop in California may not provide significant value due to the rigor of the efficiency requirements, EPA is proposing to exempt homes/apartments certified in California from demonstrating compliance with the thermal backstop. Is this a reasonable exemption? If not, what approach might EPA take to enforce this requirement, given the lack of an existing software mechanism and the challenges of creating/maintaining a California-specific calculator?

We do not have feedback on this section.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Extension of the Home Certification Organization (HCO) Construct to California

- 1) Is being certified through a Home Certification Organization (HCO) an appropriate requirement for homes and apartments certified in California?

We would like to ensure an appropriate level of stringency when being certified through a HCO. Quality control protocols should be in place and be at least as stringent as the current procedure.

- 2) Are the modifications to the *ENERGY STAR Certification System* and *ENERGY STAR Certification Protocol* appropriately written and/or are additional adjustments necessary to make these documents applicable to California?

We do not have feedback on this section.

- 3) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Residential New Construction Roadmap Comments

Organization Name: Redwood Energy

Respondent Last Name: Armstrong

Respondent First Name: Sean

Comments:

Dear Staff,

I have a few suggestions for the California Energy Star program, which I have been using in multifamily designs since 2007 as a part of LEED requirements or ZERH requirements, and often both on the same project, so I think I've used it on 60ish developments.

Quick feedback:

1. Removing top plates in California leads to terribly dense nailing patterns to address shear strength. This means every other 2x6 becomes a 4x6, effectively increasing the total thermal bridging surface area by 30% or more.
2. 3 EDR points is unhelpfully arbitrary. Just use the Exceed Code by 10% threshold, because energy professionals hate EDR in California, even CEC staff and leadership, due to its constantly changing nature and dozens of internally layered costs known only to a select handful of consultants. We have to use it, but don't make it even more complicated. Just 10% above Code please.
3. It isn't clear to some energy professionals whether they can waive various HERS/Energy Star inspections, like the Thermal Enclosure/QII checklist, if the project has also gotten to the 10% threshold without it. I had an unpleasant interaction with another energy company owner about her waiving what I understood to be mandatory measures, regardless of the 10% threshold.
4. Make it all-electric. That's what California needs from the Federal Government, some recognition and support of our leadership. Energy Star can do it in California without pissing off people in Alabama, and then expand it to other states like NYC, MA, WA, HI, etc.

Thank you!

Sean

Sean Armstrong

(he/him for business, but occasionally she/her)

Managing Principal

Redwood Energy

Schedule a meeting with me at: calendly.com/seanarmstrong

(707) 234-7573

1887 Q Street, Arcata, CA 95521

redwoodenergy.net

Grand Prize Winner of the **United Nations** World Habitat Awards-2017



ENERGY STAR Residential New Construction Roadmap Comments

Organization Name: RMI

Respondent Last Name: Kresowik

Respondent First Name: Mark

Comments:

Definition of California SFNH Version 3.3 and MFNC Version 1.3 Program Requirements

- 1) Do you have feedback on the proposed new performance targets of the ENERGY STAR Single-Family New Homes (SFNH) and Multifamily New Construction (MFNC) Program Requirements for California (i.e., an Efficiency EDR ≥ 3 points, or a Compliance Margin $\geq 10\%$, above the 2019 Building Energy Efficiency Standards)?

California has already adopted Energy Code 2022, for implementation beginning on January 1, 2023. Thus an update to ENERGY STAR SFNH Version 3.3 and MFNC Version 1.3 based on the 2019 Building Energy Efficiency Standards will already be outdated just six months after the planned implementation date. Instead, we urge EPA to revise SFNH Version 3.3 and MFNC Version 1.3 to build on both the 2019 Building Energy Efficiency Standards and 2022 Energy Code by excluding fossil-fuel fired appliances altogether. Since the 2019 Building Energy Efficiency Standards took effect, more than 50 California municipalities have adopted local code requirements to require or provide further incentives for electrification¹. The 2022 Energy Code correspondingly prioritizes electrification: “The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes...”². The only step ENERGY STAR could take in this area to continue to provide an additional level of performance above the baseline for the next few years would be to fully require electrification.

As RMI and other organizations commented on the Program Roadmap and Framework document, excluding fossil-fuel fired appliances increases energy efficiency, enhances energy security, lowers total household costs, improves indoor air quality, and helps avoid the worst impacts of climate disruption.³ Without such a requirement, the performance targets for SFNH Version 3.3 and MFNC Version 1.3 will fail to improve on the baseline code.

¹ [California's Cities Lead the Way on Pollution-Free Homes and Buildings | Sierra Club](#)

² [2022 Building Energy Efficiency Standards \(ca.gov\)](#)

³ [ENERGY STAR Residential New Construction Roadmap Comments](#)