

WHY THE ZERO CODE?

We are currently undergoing the largest wave of urban growth in U.S. history: by 2060, we will double our current building stock. Only by eliminating CO₂ emissions from new building operations will we begin to reduce building sector emissions overall.

[Learn more](#)

Architecture 2030 ZERO Code

zero-code.org

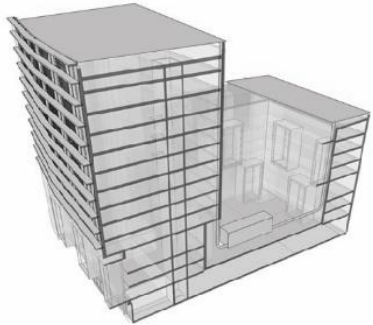
ABOUT

The **Zero Code** is a national *and* international building energy standard for new building construction that integrates cost-effective energy efficiency standards with on-site and/or off-site renewable energy to support the construction of zero carbon buildings.

The ZERO Code

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Design an energy efficient building in minimum compliance with Standard 90.1-2019, the IECC 2021 or better.



Source: Architecture 2030,
Graphic Adaptatons: Safaira and Green Ideas

Other standards can be substituted when at least as stringent

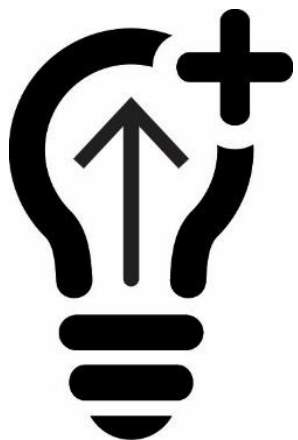
The renewable energy requirement can be reduced with the performance approach

On-site renewable energy will be inadequate for tall and energy intensive buildings

Various off-site renewable energy procurement options are available

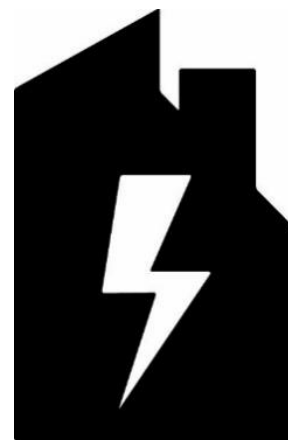
- **First version released April 2018**
- **Updated in 2020 to reference ASHRAE Standard 90.1-2019 and the IECC 2021**
- **See zero-code.org for more information**
- **Applies to commercial, institutional, hotels/motels, and high-rise residential**

2020 ZERO Code Options



Beyond-Code Energy Efficiency

However, the
prescriptive compliance
path is not available

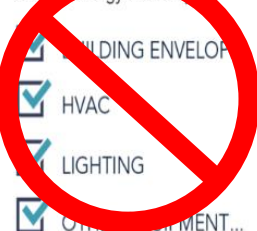


Electrification

On-site combustion
is prohibited

Prescriptive Path

Requirements for minimum
building energy efficiency



Performance Path

Modeled energy performance meets
or exceeds the minimum building
energy efficiency requirements



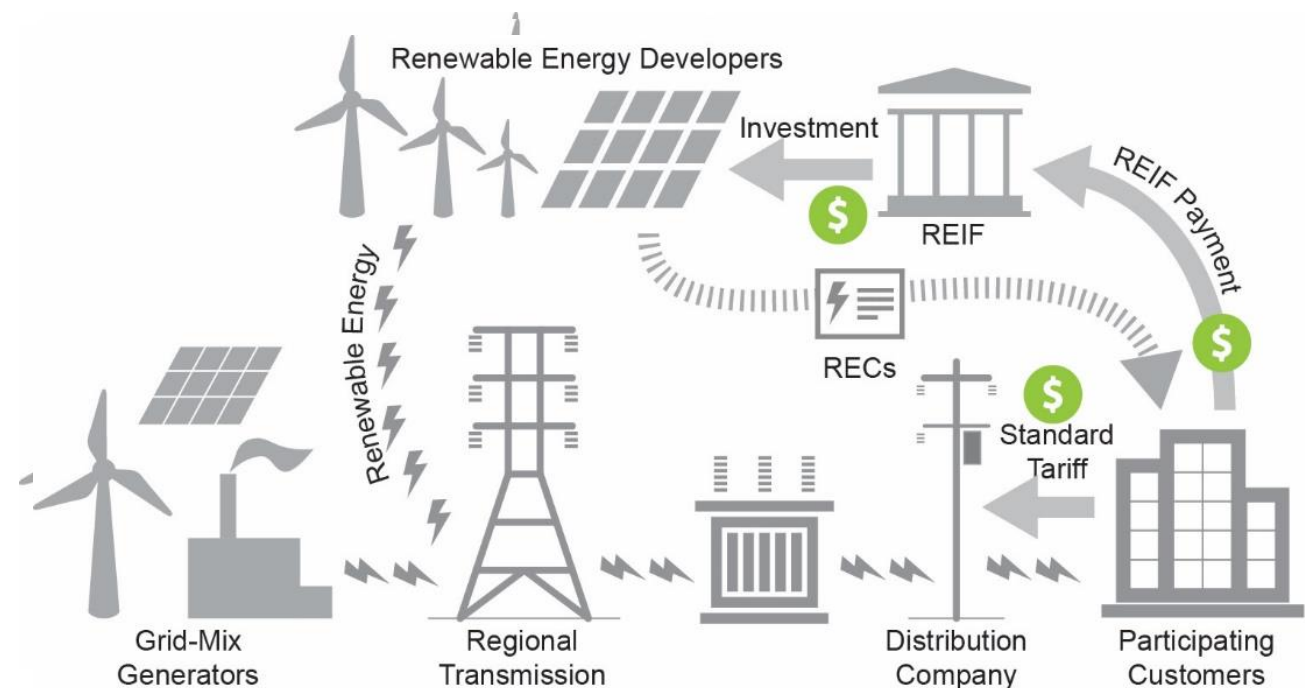
ZERO Code Derivatives

- Special California Version
 - First version October 2018
 - 2022 Version Proposed for CalGreen
- Standard 189.1-2020 and IgCC 2021
- IECC 2021 Renewable Energy Appendix



Off-Site Renewable Energy Procurement Methods

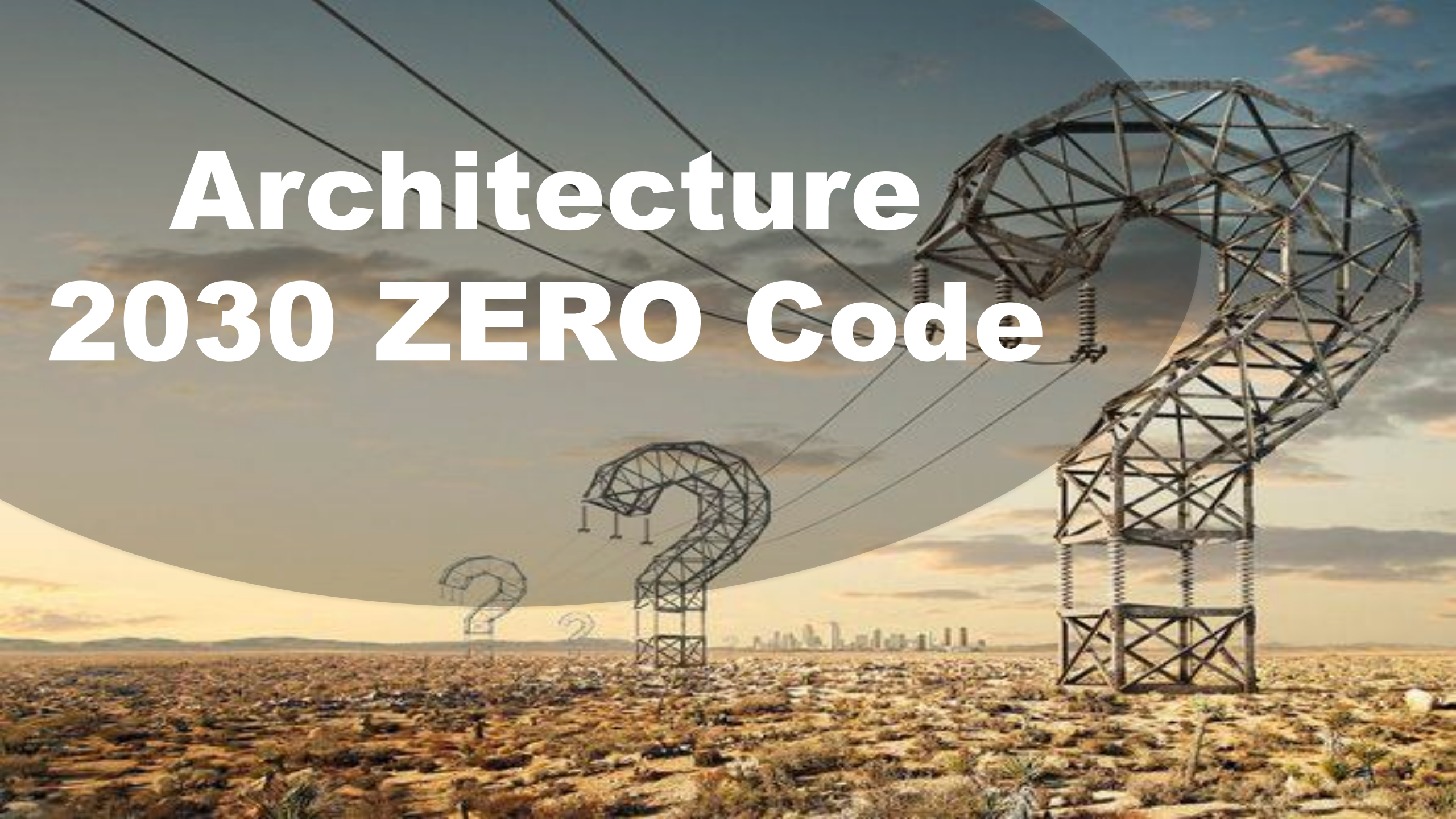
- Direct Ownership
- Community Solar
- Green Pricing
- Unbundled RECs
- Virtual Power Purchase Agreements
- Utility Renewable Energy Contracts
- Renewable Energy Investment Fund (REIF)



Minimum Requirements for Off-Site Renewable Energy

- Generators must be solar, wind, or small hydro
- Long-term and durable commitment to purchase
- Renewable energy certificates (RECs) must be retired on behalf of the ZERO Code building.

Architecture 2030 ZERO Code

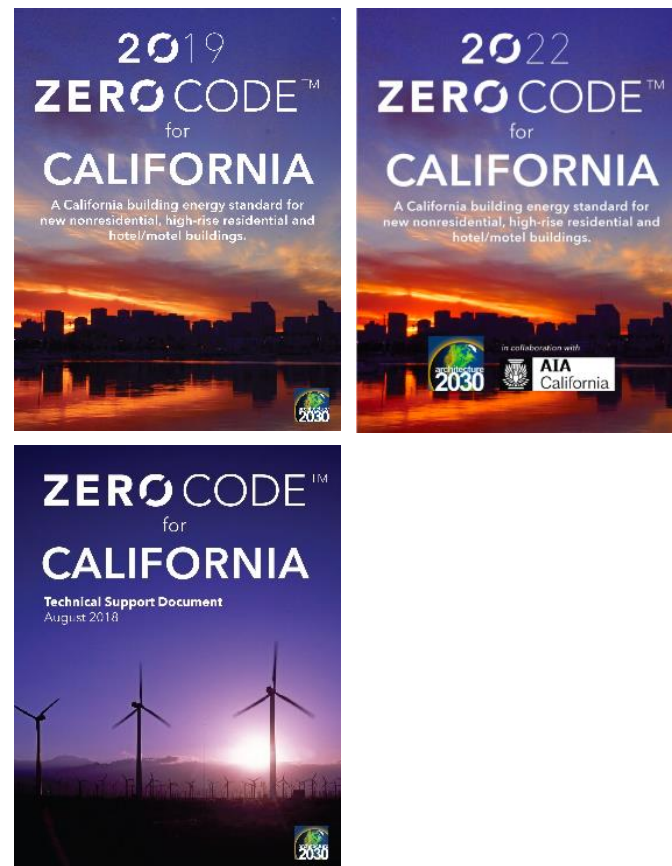


Documents (visit zero-code.org)

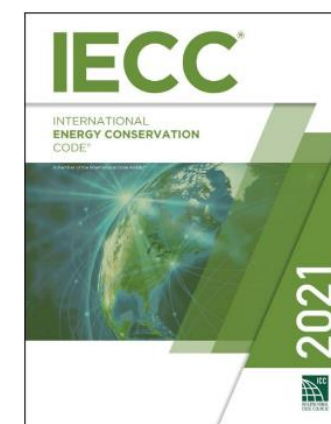
National



California



I-Codes



2020
Off-Site
TSD
Coming soon

Pathways to ZERO Code Adoption

