

BIG EFFICIENCY SQUEEZE

Patterns of Code
Compliance in
California Buildings

CADMUS

California's Zero Net Energy Targets

ZNE for all new
residential
construction by
2020



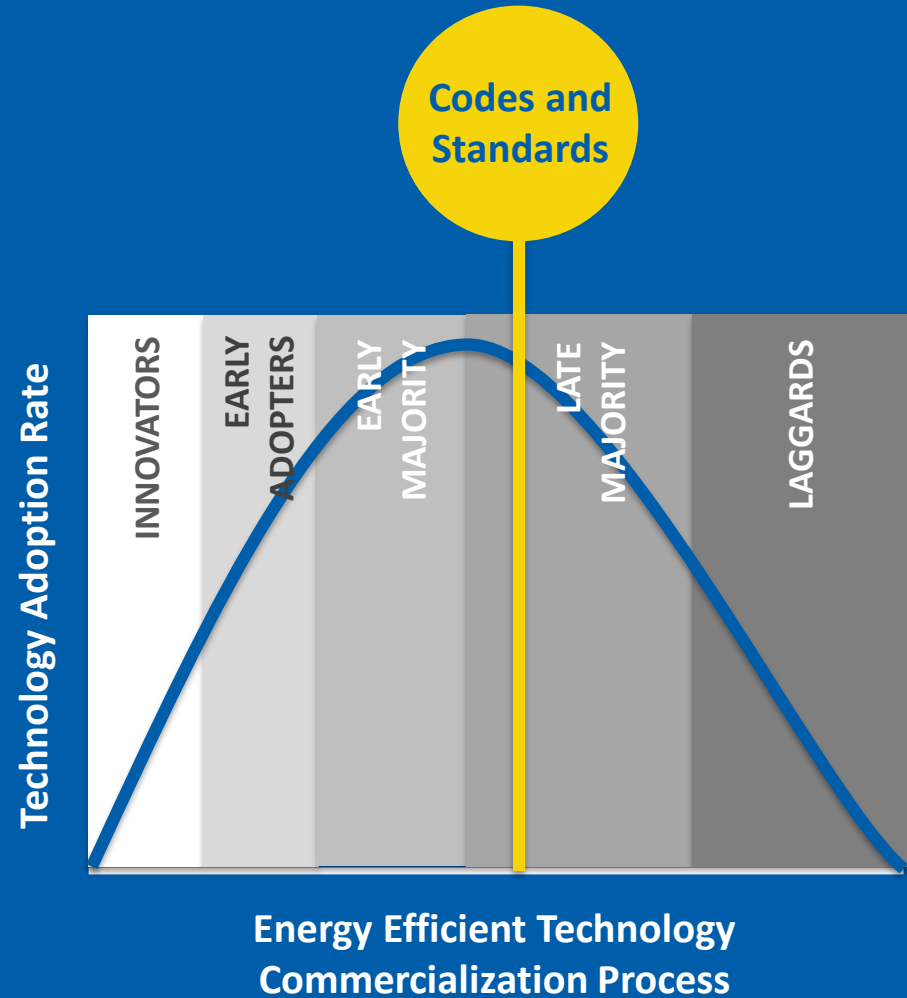
ZNE for all new
commercial
construction by
2030

Efficiency + Renewable Generation

Source: Energy Efficiency Strategic Plan (2008) from California Public Utilities Commission

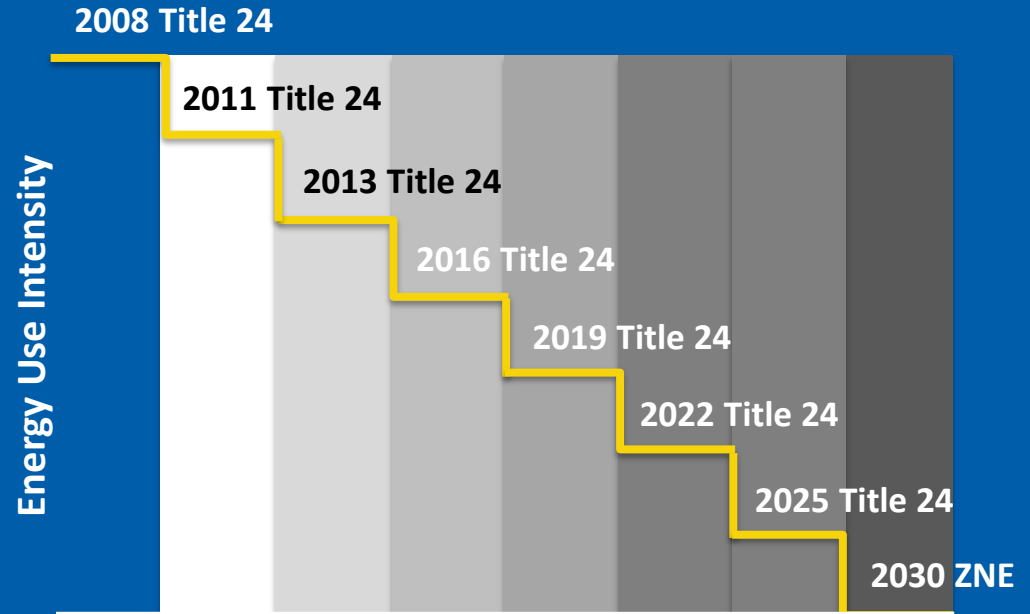
THE PAST

Codes and standards trailed market transformation

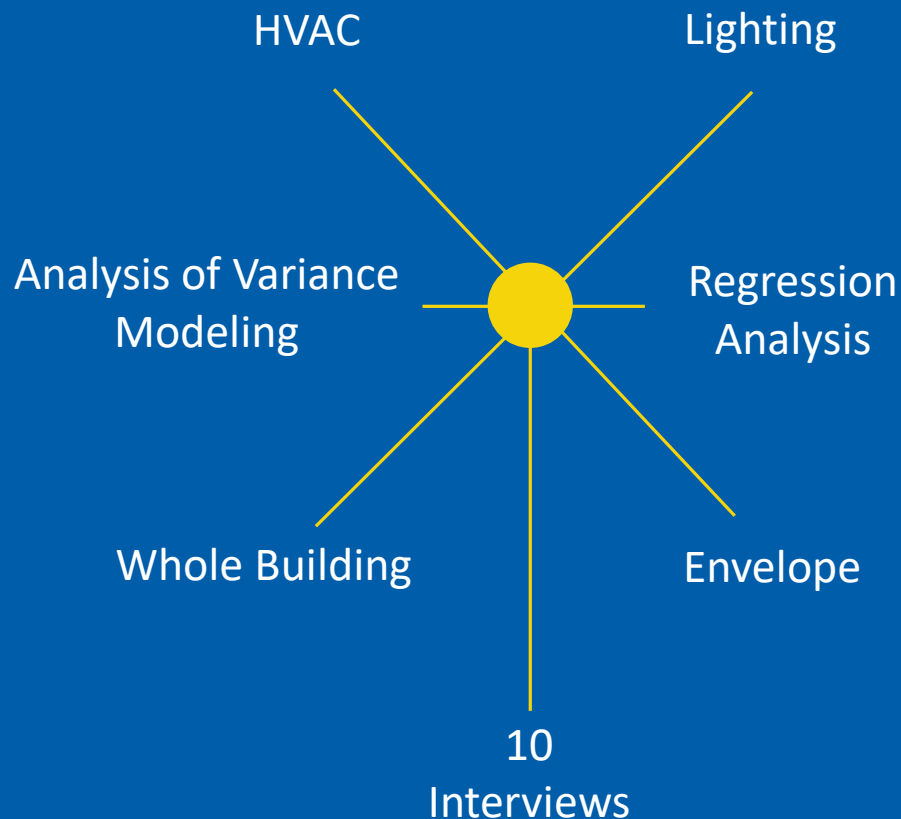


Source: ACEEE Market Transformation

THE PRESENT Codes and standards lead market transformation



Patterns of 2008 Title 24 Code Compliance in 91 Buildings



Which building types are...

**COMPLIANT?
NONCOMPLIANT?
WHY?**

Funded by CPUC and the California Investor Owned Utilities

What did restaurants and gas stations have in common?

Didn't meet envelope prescriptive requirements

RESTAURANT



GAS STATION



CAR MAINTENANCE



RESEARCH LABORATORY



Barely exceeded Title 24 2008

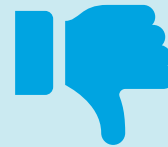
Patterns of Compliance with Title 24

SITES IN OUR SAMPLE (ON AVERAGE)

Exceeded



- Title 24 (by 10%)
- Lighting prescriptive requirements (by 8%)
- HVAC prescriptive requirements (by 3%)



Barely complied with envelope requirements (by -0.6%)

Envelope is longest-lasting component of the building, yet it receives the least amount of scrutiny during design

7 Minutes Not Enough? Contact Us



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