



# **California Air Resources Board Embodied Carbon Program**

**CALBO Annual Business Meeting**  
Hanjiro Ambrose, PhD | CARB

# California's Climate Policy Portfolio

## Mix of Regulations, Incentives, and Carbon Pricing

- **Economy-wide carbon price funding further GHG reductions:** Cap-and-Invest
- **Reduce carbon-intensity of transportation fuels:** Low Carbon Fuel Standard
- **Renewable energy requirements for utilities:** Renewables Portfolio Standard
- **Zero-emission new vehicle sale targets:** Advanced Clean Cars, Advanced Clean Trucks
- **Building energy efficiency and electrification:** Energy Code and Green Building Standards
- **Reduce short-lived climate pollutants:** Oil and Gas, Hydrofluorocarbon (HFC), and Landfill Methane Regulations
- Develop **State Strategies** for natural and working lands, cement decarbonization, carbon-capture and sequestration, and low-carbon hydrogen development

# AB 2446 and AB 43

## Statutory Requirements and Dates

**By December 31, 2026**

Adopt a framework for measuring the average carbon intensity of materials used in the construction of new buildings

**By December 31, 2028**

Develop a strategy to achieve a 40% net reduction in greenhouse gas emissions of building materials

**By December 31, 2035**

Achieve 40% net greenhouse gas reduction target

# Related Policies and Statutes

## Buy Clean California Act (2017)

- Requires Environmental Product Declarations (EPD) for eligible materials/products - Established Global Warming Potential (GWP) limits for four types of materials

## CALGreen Embodied Carbon Requirements (2024)

- Whole-building life cycle assessment requirements for large non-residential and school buildings

## SB253/261

- U.S. businesses with over \$1 billion in revenue operating in California publicly report annual greenhouse gas (GHG) emissions (Scopes 1, 2, and 3)

## SB 596

- Directs CARB to develop a strategy to achieve net-zero emissions for cement used within the state by 2045

## Cap and Invest

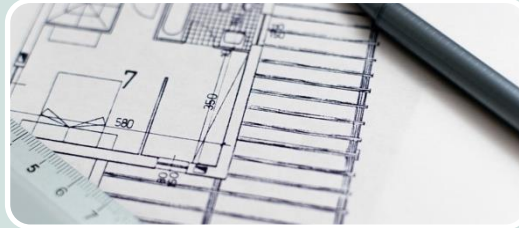
- Covers emissions from large in-state building material manufactures including cement

# What Drives Emissions from Buildings?



## Materials

Energy and non-energy related emissions from extraction, refining, manufacturing, transport, use, and disposal of building materials



## Design

Building design influences the types and quantity of building materials used, as well as operational energy requirements



## Location

Building site impacts material availability, operational energy needs, travel behavior, land-use, and construction processes

# Reporting Requirements laid out by AB2446 and AB43



## Manufacturers

- Valid environmental product declarations
- HSC §38561.3 (c)(2)



## Property Owners

- Project Life Cycle Assessments
- HSC §38561.3 (c)(1)

# Contact Us

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