

# CALIFORNIA'S LOW CARBON FUEL STANDARD



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COMMUNITY MEETINGS MAY 31 AND JUNE 1

# The Road to Zero Emissions

CARB has put a roadmap in place to drastically reduce our dependence on petroleum in the transportation sector by 2045.

**AB 32**



Requires we cut GHGs. To reach goals, fuel use must be cut by 94%.

**How cuts happen?**  
Zero emission cars, trucks and fuels.



**ACT ACC ACF**

**CARB rules that make that possible:**  
Advanced Clean Trucks, Advanced Clean Cars, Advanced Clean Fleets

- ACT: Phases out sale of most fuel-powered trucks by 2035
- ACC: 100% ZEV sales requirement by 2035
- ACF: Requires that trucks in CA be zero emissions by 2045

**LCFS**

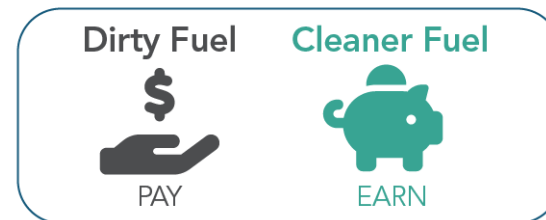
All together, these actions will help us build a cleaner, healthier California for current and future generations.

Governor Newsom creates new oversight committee to monitor oil companies



Makes fuel less polluting and encourages production of cleaner alternatives

How it works:



# LCFS Supports an Energy Transition

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12.6% reduction in the carbon intensity of California's transportation fuels

Over 25 billion gallons of petroleum fuels displaced by low-carbon fuels

46% biomass-based diesel in 2022, resulting in PM and NOx benefits

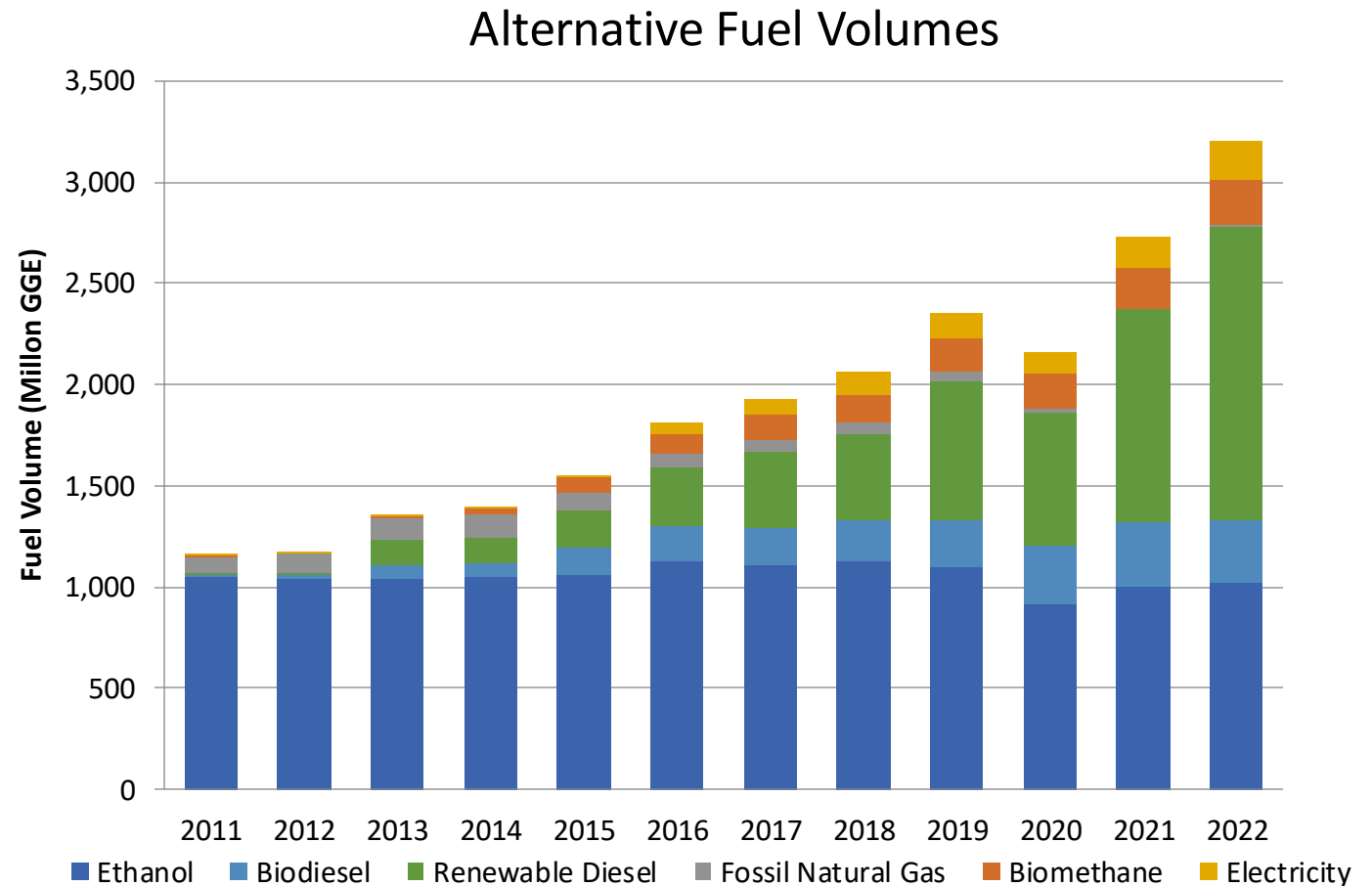
\$4 billion annually to support low-carbon investments

Supports many State programs and goals, including cars and trucks going to zero-emission vehicles

Rebates for vehicle purchases at the state and local level

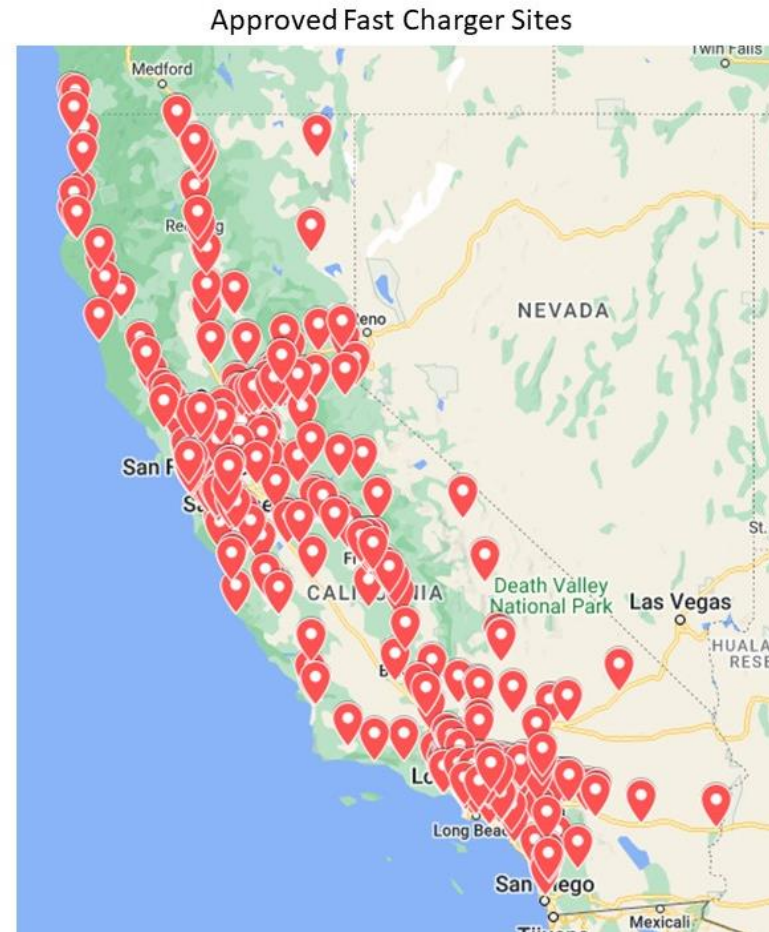
# LCFS Drives Investment & Fuel Diversification

- California has doubled the volume of low-carbon fuels in 10 years
- Low-carbon fuels supported by LCFS displace fossil fuels like gasoline and diesel



# Fast Chargers Supported by the LCFS

- LCFS has supported installation of over 3800 electric vehicle fast chargers across the State since 2019
- Planning to support truck charging to reduce emissions near ports, distribution centers and freeways

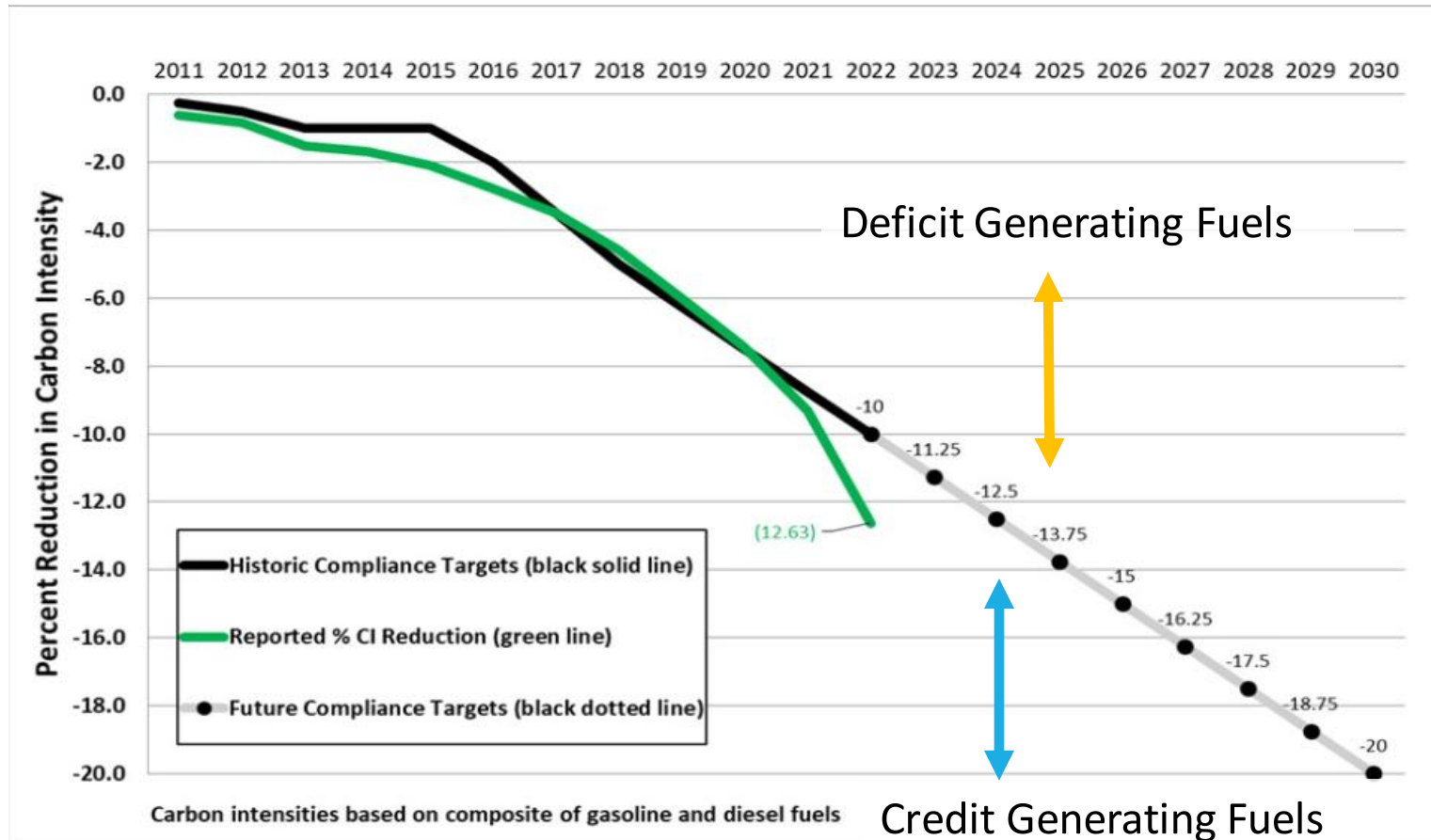


# How the LCFS Works

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- Establishes an annual, declining carbon intensity (CI) target for transportation fuels used in California
- Carbon intensity is the measure of GHG emissions associated with producing, distributing, and consuming a fuel, also known as "life cycle" emissions
- The market determines the most efficient way to reduce transportation fuel emissions—the lower carbon a fuel is, the more credits can be generated
- Each alternative fuel is given a CI score through a robust application and review process. Applications are validated prior to certification, and reported fuel is verified annually, both by LCFS accredited third-party verifiers.

# Declining Carbon Intensity Target



Last Updated 04/28/23

Examples of LCFS credit generating fuels:

- Renewable diesel
- Biodiesel
- Biomethane
- Ethanol
- Electricity
- Hydrogen
- Sustainable Aviation Fuel
- Renewable gasoline

# Other LCFS Regulation Provisions

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- Price cap to reduce cost impacts on fuel consumers
- Rigorous application, reporting, and third-party verification requirements to ensure accuracy
- Mechanisms that provide funding for vehicle rebates and equity projects from utility credit proceeds
- Crediting for direct air capture, carbon capture and sequestration, and for reducing GHG emissions in crude and refining operations



# Additional Support for Clean Fuels

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- LCFS leverages incentives from other programs, including
  - Federal Renewable Fuel Standard
  - Federal tax incentives
  - State grants and rebates
- Other States are implementing similar programs
  - Oregon
  - Washington
  - Several other States strongly considering an LCFS

# LCFS Updates

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- CARB will update the LCFS regulation to help achieve California's GHG reduction goals and carbon neutrality
- Key concepts:
  - Increase the stringency of the program to displace fossil fuels
  - Support electric and hydrogen truck refueling
  - Include aviation in the regulation to decarbonize jet fuel
  - Incentivize more production of clean fuels needed in future, such as low-carbon hydrogen
  - Support methane emissions reductions and deploy biomethane for best uses across transportation and other sectors

# What's Next for LCFS

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- Staff Proposal on Regulation Updates – coming this summer
  - Released prior to a Board meeting for consideration, available for public comment for 45 days
  - Includes proposed regulatory text, informed by workshop input
- Board consideration of Regulatory Proposal – Fall 2023
- Regulatory updates effective early 2024, if adopted by the Board

# Community Feedback

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1. Should the program prioritize incentives for specific fuels (e.g., electricity, hydrogen, RNG, renewable diesel, biodiesel, ethanol, others)? Why or why not?
2. How can the State and LCFS better support long-term ZEV ownership?
3. What types of fueling and charging infrastructure do you think are needed in your community?
4. What are some barriers you see that are preventing ZEV ownership or ZEV fueling/charging?
5. Given the transition to ZEVs will take time, what are some strategies the LCFS should pursue to promote near-term GHG reductions from vehicles and vehicle fuel use?
6. What low carbon transportation incentives do you think are most needed (e.g., more rebates for new/used vehicle, easier access to existing rebates, charging/fuel subsidies, free/reduced transit, lower overall utility bills, others)?
7. Other ideas/feedback on the program?

# Public Comment Logistics

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- Workshop materials and public comment page available on the LCFS Meetings and Workshops page: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-meetings-and-workshops>
- Written feedback accepted through June 14<sup>th</sup> at 11:59 p.m.
- Q&A during the workshop
  - 1) Use the “**Raise Hand**” function in the “reactions” box at the bottom Zoom toolbar
  - 2) When staff call your name, please “**unmute**” yourself to begin
  - 3) Commenters will be given 3 minutes for comments, no ceding time to others

