Earn revenue with electric vehicles and California's Low Carbon Fuel Standard program

What is the Low Carbon Fuel Standard (LCFS) program?

Since 2009, the California Air Resources Board (CARB) has administered the Low Carbon Fuel Standard, or LCFS, program to help achieve statewide carbon reduction goals by decreasing the transportation sector's carbon intensity 20% by 2030. The LCFS is a market-based compliance measure that creates economic value from low-carbon and renewable fuel technologies.

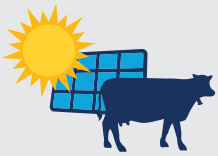
Who participates?

Emitters

Regulated entities, such as importers, producers, and refiners of petroleum fuels are required to participate.

Beneficiaries

Clean energy producers and users can opt into the program to generate credits. This includes electric vehicle fleets.



How do LCFS credits work?

The LCFS program works as a market system where users and producers of clean energy, including electric vehicle fleets, earn credits through their emission reductions, while emitters purchase those credits to offset their carbon footprint.

1. Producers and users of clean energy earn credits based on the carbon they displaced
2. Credits are earned for every metric ton of emissions avoided
3. Those credits are sold to regulated emitters that need carbon reductions to remain in compliance with CARB
4. Producers and users of clean energy earn revenue from credits sold

Why do EV fleets present a big opportunity with the LCFS program?

Most fuels in the LCFS program give credit generation rights to fuel producers. With electricity as a fuel source for EVs, the charging infrastructure owner has the right to generate credits. Therefore, fleets that own and operate chargers to support their EVs can generate credits.

How much were LCFS credits worth in 2019?

1 LCFS CREDIT = 1 METRIC TON CO_2 DISPLACED

1 LCFS CREDIT = $190

LCFS CREDIT $2.7B

14,146,000 credits were transacted totaling **$2.7 billion** in trades

What is the revenue opportunity for EV fleets?

Class 6 electric box truck + **20,000** miles driven annually = **36** METRIC TONS CO_2 DISPLACED X **$190** = **$7,000** earned per year per Class 6 truck

Class 8 electric truck + **60,000** miles driven annually = **173** METRIC TONS CO_2 DISPLACED X **$190** = **$33,900** earned per year per Class 8 truck

Revenues can be used to offset costs from:

- EV purchases and maintenance
- Charging infrastructure purchases and maintenance
- Purchase of electricity
- Administrative fees

Earn more with renewable energy

- Fleets that strategically use renewable electricity for charging, or purchase renewable energy credits (RECs), can further increase their LCFS revenue streams.
- With renewable electricity, the same Class 8 truck from the example above has the potential to earn **$41,000 annually**, a 22% increase.

PG&E can be the partner to help you get started

A key requirement of the LCFS program is that the electricity used to charge a fleet's EVs must be reported accurately to generate credits, meaning it must be monitored and recorded separately from non-fleet operations, such as buildings or other equipment. This can be accomplished with:

a dedicated meter installed by the utility

OR

submeters installed by the fleet owner

OR

smart chargers that collect and record charger-specific data

As part of PG&E's EV Fleet program fleet customers receive support to set up a dedicated meter for vehicles—effectively making the fleet primed to start generating LCFS credits.

LCFS credit generation process

STEP 1 Fleet registers as Opt-In Entity with CARB

STEP 2 Fleet registers and maintains list of all charging infrastructure ("Fuel Supply Equipment")

STEP 3 Fleet reports electricity used for EV charging to CARB

STEP 4 Reports must be submitted every quarter, even if the amount of electricity used for EV charging is zero

STEP 5 CARB verifies reports and issues credits within 90 days of the end of each quarter

STEP 6 Fleet sells credits to regulated emitters, turning credits into cash (the credit value fluctuates based on supply and demand)

STEP 7 Fleet completes annual report to CARB documenting use of funds

Start earning with LCFS

Contact an EV Fleet specialist to see how LCFS can support your electric vehicle program at pge.com/evfleet

eV fleet