Earn Revenue with EVs and California's LCFS 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?

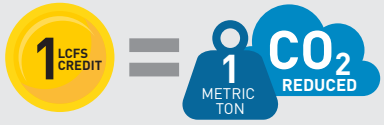
The LCFS program works as a market system where users and producers of clean energy, including electric vehicle fleets, earn credits through their emission reductions, while emitters purchase those credits to offset their carbon footprint.

1. Producers and users of clean energy generate credits based on the greenhouse gas (GHG) emissions they reduce
2. Credits are generated for every metric ton (MT) of carbon dioxide equivalent (CO_2e) reduced
3. Those credits are sold to regulated emitters that require GHG reductions for LCFS program compliance
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.

What is the annual average value of LCFS credits in 2022?



25,279,000
credits were transacted during 2021

$4.7 billion
in trades (2021)

What is the revenue opportunity for EV fleets?

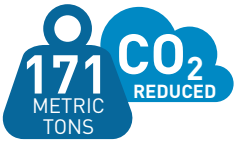
This revenue opportunity for EV Fleets is calculated based on 2022 LCFS program data

Class 8
electric truck

+

60,000
miles driven annually

=



X

$80 per MT

=

$13,680
earned per year per vehicle

Class 6 + 20,000mi annually = 35 metric tons CO_2 reduced x $80 per MT = **$2,800**
(electric box truck)

eTRU + 40,150 kWH/year = 33 metric tons CO_2 reduced x $80 per MT = **$2,640**
(Transportation Refrigeration Unit, assumes 110 kWh per eTRU operation in a 24 hour period)

Forklift + 2 hrs daily operation = 17 metric tons CO_2 reduced x $80 per MT = **$1,360**
(5,000 lb capacity, assumes 50 weeks at 5 days/week)

School bus + 10,800mi annually = 18 metric tons CO_2 reduced x $80 per MT = **$1,440**

Revenues can be used to offset costs from:

- EV purchases and maintenance
- Charging infrastructure purchases and maintenance
- Electricity costs
- Administrative fees

Earn more with renewable energy

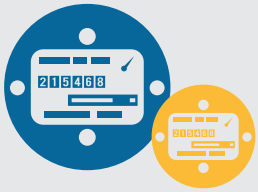
- Fleets that strategically use renewable electricity for charging, or purchase renewable energy certificates (RECs), can further increase their LCFS revenue streams.
- With renewable electricity, the same Class 8 truck from the example above has the potential to earn **$16,400 annually**, nearly a 20% 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

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

1. Fleet registers as Opt-In Entity with CARB
2. Fleet registers and maintains list of all charging infrastructure ("Fuel Supply Equipment")
3. Fleet reports electricity used for EV charging to CARB
4. Reports must be submitted every quarter, even if the amount of electricity used for EV charging is zero
5. CARB verifies reports and issues credits within 90 days of the end of each quarter
6. Fleet sells credits to regulated emitters, turning credits into cash (the credit value fluctuates based on supply and demand)
7. Fleet completes annual report to CARB documenting use of LCFS credit revenue funds

Start earning with LCFS

Contact an EV Fleet specialist to see how LCFS can support your electric vehicle program.

Submit an interest form >>

Use PG&E's EV Fleet Savings Calculator to visualize LCFS credit generation based on your fleet operations.

EV Fleet Savings Calculator >>

Learn more about EV Fleet: pge.com/evfleet