

Monetize your EV Fleet with LCFS Credits

Local Government's current and future EV Charging stations and electric fleet vehicles can generate revenue through Low Carbon Fuel Standard (LCFS) credits.

The key benefits of LCFS Credits include:

- Revenue is recurring and non-competitive (unlike grants)
- Revenue can put towards your priorities, from operations to sustainability initiatives
- Revenue can be stacked with other opportunities like grants and rebates

Low Carbon Fuel Standard (LCFS) Credits: Turn Charging Costs into Charging Revenue

If you own EV charging stations or electric vehicles in your fleet, then you are eligible to receive revenue from the LCFS program. While the ins-and-outs of the LCFS program can be complex, this summary will introduce you to the fundamentals of the LCFS program so your team can consider using LCFS Credit revenue to your boost your budget.

Eligible Electric Vehicles

- EV Charging Stations
- Fleet Cars and Trucks
- Forklifts
- Parking Interceptors
- Public Transit
- School Buses
- Refuse Trucks

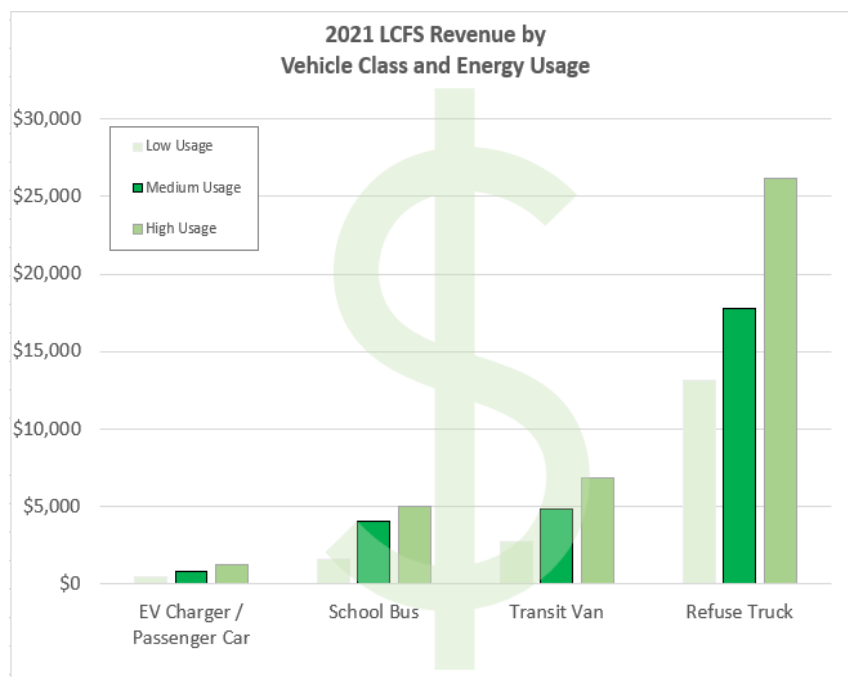
Eligibility

LCFS credits can be generated from new or existing equipment, and can typically be combined with other grants and rebates. This program should also be considered when planning for the future conversion to electric equipment, particularly as new California Air Resource Board (CARB) standards come into place for all vehicle classes in the future.

Value of LCFS Credits: The more you Charge, the more you Make

The LCFS program is designed so that the more you charge your e-vehicles, the more credits and value you create. The value of LCFS credits depends on market conditions at the time of trading. Because of fluctuating pricing and regulations around brokering, it is beneficial to have a specialized LCFS partner to claim and monetize credits in the marketplace.

To provide an example of the annual Revenue generated by different types of equipment, this graph shows values based on PineSpire's LCFS services and a range of vehicle energy usage.



Taking a comprehensive approach and enrolling all of your equipment, both large and small, will ensure you the most total revenue. The following Example Fleet shows how broadly electrified operations can generate significant LCFS revenue for your municipality:

Example Future Electric Fleet Revenue:

+ 20 Public EV Chargers: \$16,600 per year

+ 10 Fleet Vehicles : \$8,300 per year

+ 2 School Buses: \$8,060 per year

+ 2 Refuse Truck: \$35,060 per year

= Total Value: \$68,560 per year

= Total 5-Year* Value: \$318,200

**Five Year value based on projected LCFS Credit value in future years*

Larger equipment, like Refuse Trucks, are substantially higher revenue generators, averaging \$16,500+ per year per vehicle. This is because Refuse Trucks have a high amount of use (i.e. operating hours) and are classified as heavy duty vehicles. This also means that converting to electric Refuse Trucks will have the large impact on your carbon reduction goals.

Sustainability Pays

As part of participating in the LCFS market, you will have consolidated, detailed data on all of your EV charging stations and EV fleet vehicles. The energy usage data is the basis of calculating carbon and emissions reductions, documenting your success towards sustainability goals. The LCFS Credit enhancement process (step 3 in below graphic) actually brings down the carbon intensity of your energy source to zero to increase your overall credit value. This further boosts your GHG reduction scores. EV's also bring immediate local improvements to air quality.

Benefits of Electrification

As many drivers have already discovered, there are many benefits to electrification. While it can require a larger up-front capital investment, the cost of owning and operating an electric vehicle can be significantly lower than conventional fuels over the life of the vehicle. This is largely due to the lower fuel costs (electricity compared to gasoline or diesel) as well as lower operations and maintenance costs. Electric equipment, without an internal combustion engine, is less likely to need maintenance or have down-time. Additionally, electric vehicles are compliant with CARB's current and future air quality regulations. This reduces your staff time in reporting and compliance costs.

EV Savings

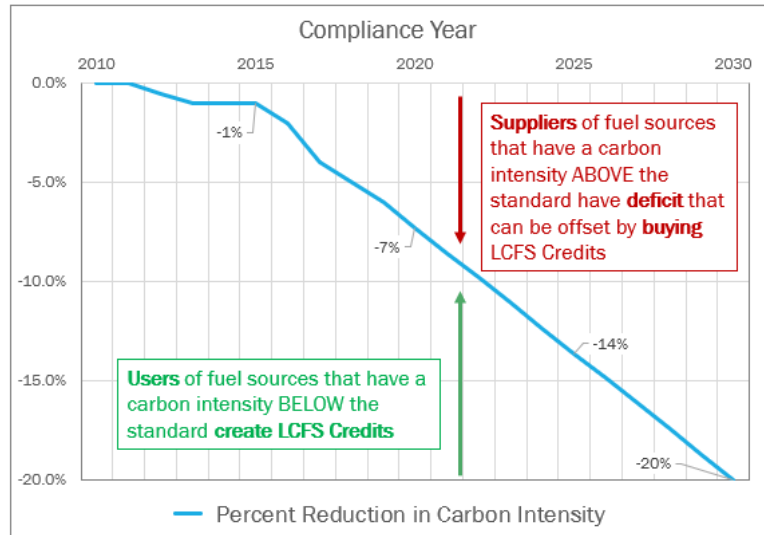
- Lower Fuel Cost
- Lower O&M Cost
- Lower CARB Compliance Cost



Regulatory Background: "How it Works"

California passed legislation in 2009 to create the LCFS program with the goal of reducing the carbon-intensity in transportation fuel. The LCFS program fits into a larger suite of AB 32 measures that set Green House Gas emission targets.

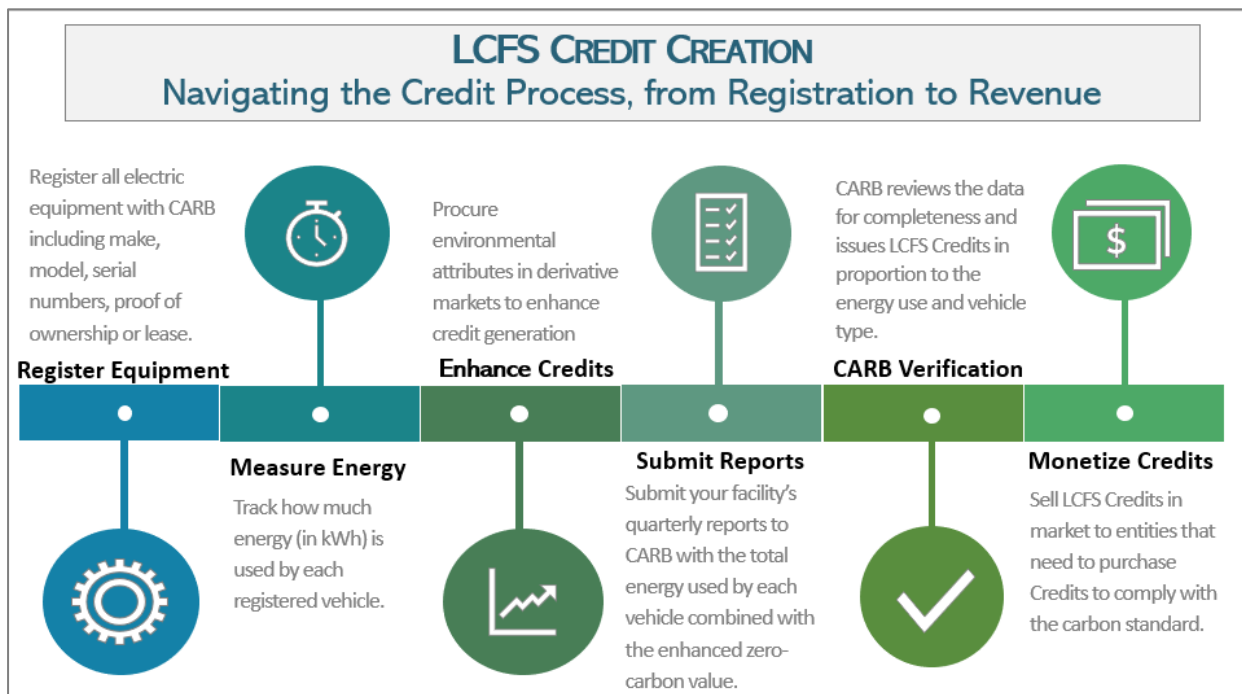
The LCFS program is a 'cap and trade' style program aimed at lowering the carbon intensity of *fuel* used in transportation. Based on the carbon standard set by CARB, fuel producers such as major oil and gas companies are required to reduce the carbon in their fuel, buy credits from users of clean fuels, or face penalties. Every time you use a low-carbon fuel (such as electricity), you generate credits that can be sold to the high-carbon fuel producers to help them comply with the targets.



CARB's role is to 'referee' the LCFS program, ensuring compliance with credit creation and setting a cap to LCFS prices. However, CARB does not provide the funding or determine the credit price. The value of an LCFS credit (in Dollars per Metric Ton of Carbon (\$/MT)) is determined in the marketplace based on supply of credits and demand of high-carbon fuel producers.

Claiming your LCFS Credits

The following figure shows the steps to claiming and monetizing LCFS Credits; partners like PineSpire can manage this process from beginning to end for you.



Get Started with an Inventory

The first step towards participating in LCFS market and developing an electrification strategy is to start with an inventory. Your database of EVs should include:

- All of your current EVs and EV chargers,
- Documentation on the make, model, serial number, year, and charging location of EVs and/or chargers
- Near-term and long-term goals of additional EVs you'd like to acquire including the vehicle type and projected information about the use case (mileage, operating hours, location, etc.)

With your data in place, you are prepared to estimate your LCFS revenue potential and get tailored information on your specific fleet from LCFS experts. You can also budget for future electric equipment and pursue grants and incentives using your baseline of consolidated data to support your applications.

Additional Information

For additional information or consultation on LCFS Credits and Revenue, please contact Ryan Huggins at PineSpire: RHuggins@PineSpire.com or 559-372-2790.