



## LOW CARBON FUEL STANDARD (LCFS) CREDITS: TURN ENERGY USE INTO REVENUE

Almond Operations using electric vehicles and equipment have an opportunity to claim low-carbon-fuel credits. If you own or lease electric equipment (such as Forklifts, Pallet Jacks, or Orange EV Yard Tractors) and have not yet started participating in the program, your operations are eligible to receive revenue from this 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 Operations can consider adding revenue from these credits to your bottom line.

### Eligibility

The LCFS market can create revenue for agricultural operations in all portions of the product chain from field to shelf. Importantly, LCFS credits can come from new or existing equipment, and can 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 forklifts in the near future.

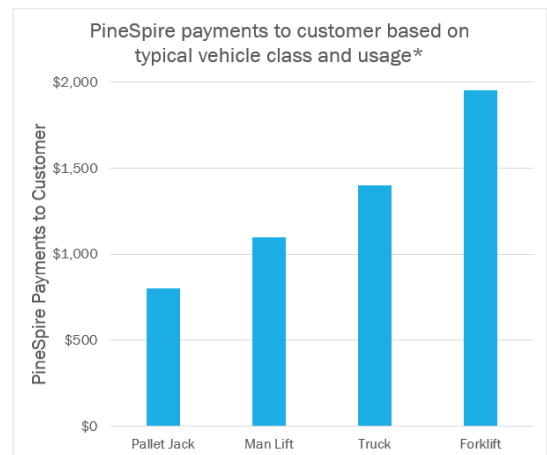
### Eligible Electric “Vehicles”

- Terminal (Yard) Tractors
- Forklifts
- Pallet Jacks
- Man/Aerial Lifts
- Cars and Trucks
- Refrigeration Trucks
- Farm Equipment
- Cargo Handling Equipment

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

At a fundamental level, the LCFS program is designed so that the more you charge your e-vehicles, the

more credits and value you create. LCFS credits are valued in dollars per metric ton of carbon dioxide equivalent (\$/MT), and the value of a Credit depends on market conditions at the time of trading. The LCFS market is relatively complex and benefits from having specialized partners to claim and monetize credits in the marketplace. To give a sense of the value of the LCFS credits, Table 2 provides the annual Revenue generated by different types of equipment, based on PineSpire’s LCFS services. Larger equipment, like electric yard truck, are substantially higher revenue generators, averaging \$10,000 per year per unit.



\*Annual payment from PineSpire estimated based on typical commercial usage

### Regulatory Background: “How it Works”

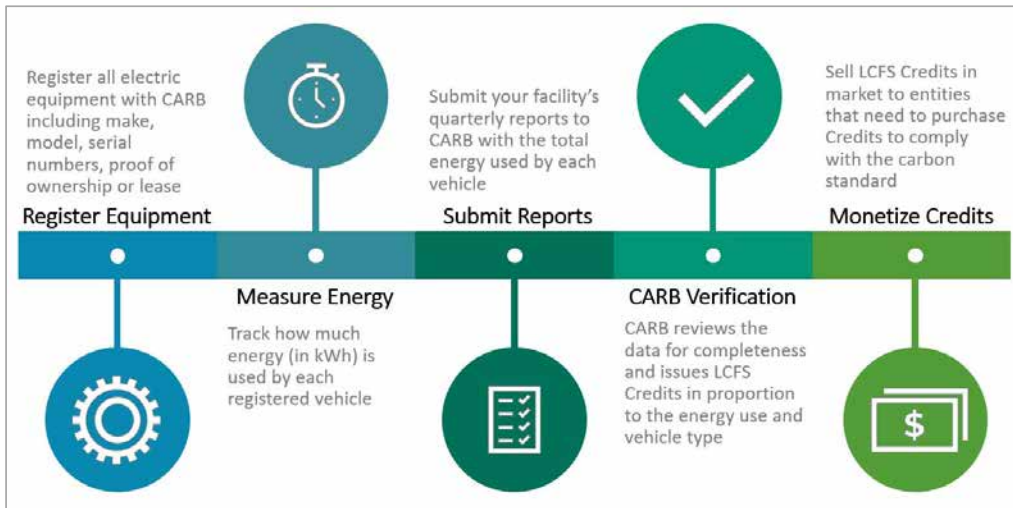
The Low Carbon Fuel Standard (LCFS) program, administered by the CARB, is a ‘cap and trade’ style program aimed at lowering the carbon intensity of fuel used in transportation. Based on the standard set by CARB, fuel producers such as major oil and gas companies are required to reduce the carbon in their 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. The value of an LCFS credit (in Dollars per Metric Ton of Carbon (\$/Mt)) is determined in the market based on supply of credits and demand of high-carbon fuel producers.

(con’t pg 18)

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## Claiming your LCFS Credits

The following Table 3 shows the steps to claiming and monetizing LCFS Credits; partners like PineSpire can manage this process from beginning to end for you.



## Benefits of Electrification

As many almond processors have already discovered, there are many benefits to electrification, as shown in Table 4. While it can require a larger up-front capital investment, the cost of owning and operating an electric forklift or other electric vehicle can be significantly lower compared to propane or diesel over the life of the vehicle. This is largely due to the dramatically cheaper fuel costs (electricity compared to liquid fuel) 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. Electric equipment also creates a safer (and more comfortable) working environment by dramatically reducing noise and improving communication. It also improves the air quality for staff working with their vehicles and in areas (particularly indoors) where vehicles could be operating. The lack of emissions also eliminates the possibility of damage or negative impacts on food products.

## Additional Information

For additional information or consultation on LCFS Credits and Revenue, please contact Ryan Huggins at PineSpire: [RHuggins@PineSpire.com](mailto:RHuggins@PineSpire.com) or 559-691-4284.

