

Accelerating the Adoption of Electric Garbage Trucks



Having zero emission medium- and heavy-duty vehicles is critical for Oregon to meet its greenhouse gas reduction goals. The benefits in the battle against the impacts of climate change are significant, but even more so are improvements to local air quality and public health. DEQ is considering adoption of regulations to require more of these vehicles to be zero emission, but right now, the Clean Fuels Program has several new ways to kick start this transition.

The case for electric fleets

There are many reasons a waste management fleet would want to convert their trucks to electric technology. Electric trucks remove the driver's and mechanic's exposure to tailpipe emissions, have lower maintenance needs, and lowers greenhouse gas emissions in Oregon. Electric trucks are key to improving air quality and the health of a community.

Moving from one to many

There are fleets that are currently participating in pilot programs where they have bought a single electric garbage truck. But how do we get that to turn into 10 or 100, given the higher cost? There are a number of programs that may provide some or all of the costs for electric garbage trucks such as those offered through local utilities, and federal and state grant programs. In addition, the Clean Fuels Program can play a role.

Generating credits in the Clean Fuels Program

If you own the charger to charge an electric garbage truck, you are currently eligible to generate the CFP credits for the electricity that is used. Every quarter, you report the amount of electricity to DEQ and credits are issued to your account. You can sell these credits and use the revenue to support your electrification activities.

On an individual vehicle level, the rate of credit generation may seem to be a little drop in a very large bucket. To accelerate that pace, a waste management fleet that is contracted through a public agency can now request DEQ to issue credits in advance of when they would normally be generated. This is called advance crediting.

How does advance crediting work?

The fleet estimates the number of miles typically driven by the electric garbage truck and the amount of electricity that vehicle would use over a year. DEQ will work with the you to translate those estimates into the number of CFP credits that are generated in a year. Then that value gets multiplied by up to six years to calculate the number of advance credits that are available to the you.

What happens next?

- Applying for advance credits – DEQ will accept applications at least one time a year.
- Negotiating the agreement – An agreement will formalize the number of advance credits issued and how long the payback period is.
- Selling the credits – Credits can be sold through the Oregon Fuels Reporting System at any time throughout the year.
- Investing the revenue – The revenue can be spent on anything related to electrifying the garbage truck fleet.
- Paying back the advance – The agency will submit quarterly reports but instead of generating new credits, its balance will be drawn down.
- Returning to regular credit generation – Once the advance is paid off, the agency can continue to generate new credits.

Oregon Clean Fuels Program

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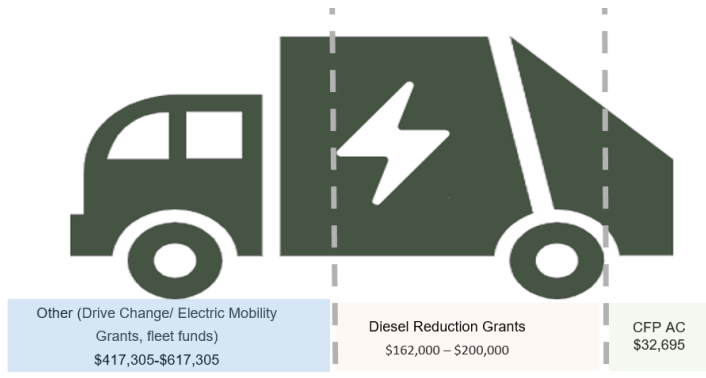
Electric Garbage Truck Example

Here is an example of an electric garbage truck that drives approximately 15,000 miles per year which uses approximately 38,690 kWh per year to charge. DEQ estimates that the fleet could get \$32,000 dollars through the advance crediting provision over a six-year period.

Advance Credits: Garbage Truck by the Numbers

Year	Estimated			Revenue if credits sold @ \$125
	Miles	kWh	Credits	
2022	15,000	38,690	46	\$5,729
2023	15,000	38,690	45	\$5,599
2024	15,000	38,690	44	\$5,470
2025	15,000	38,690	42	\$5,298
2026	15,000	38,690	42	\$5,298
2027	15,000	38,690	42	\$5,298
Total:				\$32,695

This calculation could vary depending on the source of your electricity, the type of vehicle, and the market price of the credits at the time you want to sell your credits.



For example, if a new electric garbage truck costs \$650,000, a fleet could stitch together multiple funding sources to pay for it including a utility grant such as the PGE Drive Change or PacifiCorp Electric Mobility grants, state diesel reduction grants, and CFP advance crediting.

For any additional questions, contact the Clean Fuels Program at OregonCleanFuels@deq.state.or.us

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.