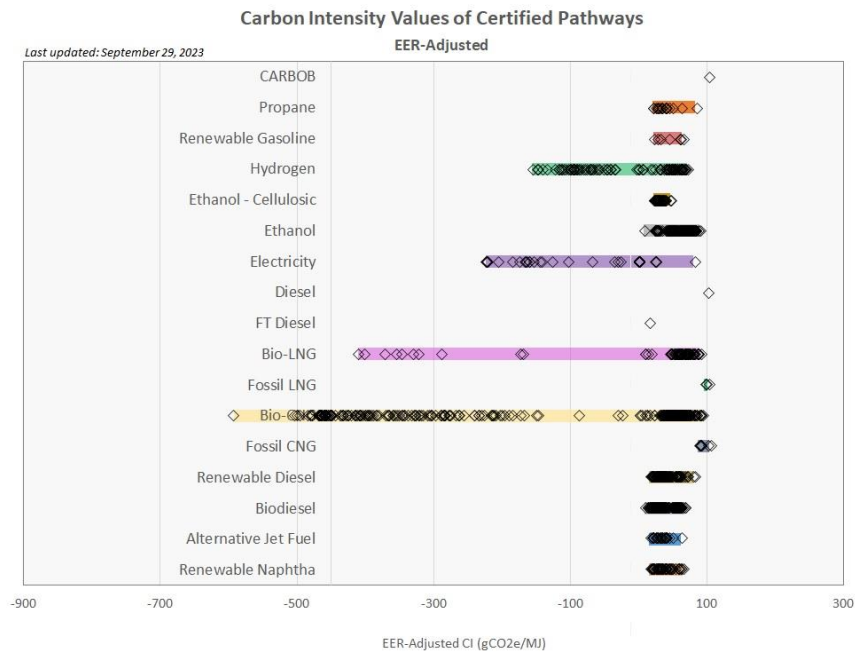


## Illinois Clean Fuel Standard Medium- and Heavy-Duty Factsheet

### What is a Clean Fuel Standard Policy?

A [Clean Fuel Standard \(CFS\) policy](#)—also referred to as a Low Carbon Fuel Standard—sets targets for reducing the carbon intensity (CI) of fuels supplied to transportation and encourages the investment, use, and production of cleaner low-carbon transportation fuels. Participants of a CFS program generate credits for reducing their CI by using alternative fuels such as electricity, biofuels, and hydrogen, to name a few. At the same time, those above the CI target produce deficits and must purchase credits to offset their higher CI. Ultimately, a CFS policy reduces greenhouse gas (GHG) emissions, creates a dependable alternative fuels market, and increases energy security.



Source: [LCFS Pathway Certified Carbon Intensities](#), CARB, September 2023.

### The Case for Medium- and Heavy-Duty Electric Vehicles in Illinois

A CFS policy is critical in addressing [medium- and heavy-duty \(MHD\) vehicles](#) pollution, including delivery vans, school buses, transit buses, fire trucks, garbage trucks, freight transportation, and more. According to a [study commissioned by the Natural Resources Defense Council and Union of Concerned Scientists](#), MHD vehicles make up only 7% (more than 615,000) of the vehicles on the road in Illinois, but account for more than a third of GHG emissions. The resulting low air quality disproportionately affects historically disadvantaged communities, bringing about adverse health effects. In May 2022, [the Respiratory Health Association](#) ranked Illinois fifth of all states in the number of deaths per capita attributed to diesel pollution, and 12 counties situated in the Chicago area, are among the top 9% of counties nationwide for exposure to fine particulate matter from diesel. Transitioning to MHD electric vehicles (EVs) is the best solution to these challenges.

[Union of Concerned Scientists: Clean Fuel Standards. \(2020\).](#)

[eIQ Mobility: How Fleets Can Harness California's LCFS Credits. \(2022\).](#)

[MJB&A: Medium- & Heavy-Duty Vehicles. \(2021\).](#)

[Great Plains Institute: The MHD EV Market: Plugging into the Future Part I. \(2021\).](#)

[NRDC: Illinois Clean Trucks Program. \(2022\).](#)

[NRDC: MHD Vehicle Electrification 101. \(2021\).](#)

[OPIS: California's LCFS: Just How Much Stronger Will the New Targets Be? \(2022\).](#)

[Great Plains Institute: A Clean Fuels Policy for the Midwest. \(2020\).](#)

Illinois has already committed to an electrified transportation future through its [Climate and Equitable Jobs Act of 2021](#) (CEJA) and the [Reimagining Electric Vehicles Act of 2021](#) (REV Illinois). CEJA aims to establish 100% Clean Energy by 2050, including having one million registered EVs in the state by 2030. The REV Illinois program is specifically designed to help create new jobs in the cutting-edge EV and renewables industries, to pave the way for investment in priority areas, and to incentivize employers to provide ongoing skills training in this field. Illinois school districts have committed [210 electric school buses](#) as of 2023, ranking the state in 6<sup>th</sup> place within the top 10 states with the most committed buses. A CFS policy supports and provides multiple avenues to accelerate this transition.

On February 8, 2023, Senator David Koehler (D) introduced [Senate Bill 1556 to establish a clean transportation standard \(CTS\)](#) in Illinois and reduce transportation fuel CI by 20% by 2038. SB1556 allows the agency to prescribe further CI reduction targets past 2038. The Illinois CTS is supported by a broad coalition of stakeholders, including clean fuel producers, the electric vehicle charging sector, and clean energy organizations. The bill was re-referred to assignments on March 10, 2023.

### **Benefits of a Clean Fuel Standard Policy for Medium-and Heavy- Duty Electric Vehicles**

The process for [MHD electrification is hindered by market barriers](#) such as higher up front purchase price, few financing options, lack of higher-powered DC fast charging infrastructure, and inflexible electricity rate designs. A CFS policy serves as a unique and vital revenue source that can supplement current MHD EV policies and incentive programs. Through its credit incentive system, credits are provided back to the owner or operator of an EV charging station, such as a fleet operator. The revenue from selling the credits can be used to offset the current upfront cost differential between EVs and internal combustion engine vehicles as the price of EV batteries declines. In the end, a CFS policy can provide a stable and long-term funding source, unlike most state and local funding sources for EV programs that can be depleted quickly, resulting in start-stop EV programs.

California was [the first state to adopt this policy in 2009](#), with various modifications to the policy in 2013, 2016, and 2018, with its most recent updated requirements of a 20% reduction in the state fuel pool by 2030. In 2018, California amended its policy to include a [ZEV infrastructure credit](#), which was created to assist in the deployment of ZEV infrastructure, recognizing electricity as a fuel. Therefore, fleets that own and operate chargers to support their EVs can generate LCFS credits. Revenue from MHD EVs LCFS credits is significant compared to light-duty vehicles. For example, a Class 8 electric truck that drives 60,000 miles annually can offset 173 metric tons of CO<sub>2</sub> emissions and, assuming a 2019 LCFS credit worth of \$196, the revenue opportunity for the EV fleet comes down to approximately \$33,900 per year per vehicle. Below are more examples of other MHD EVs revenue opportunities.

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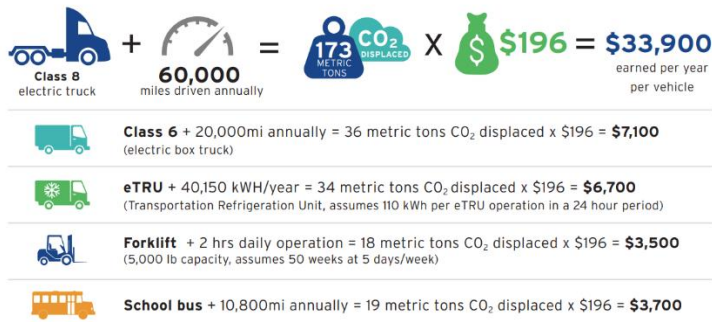
[NRDC: Illinois Clean Trucks Program. \(2022\).](#)

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## What is the Revenue Opportunity for EV Fleets?



Figures above are rounded for ease of calculation and are not meant to be exact.

Source: [SDGE](#), Power Your Drive for Fleets: Earn Revenue for EVs with California's Low Carbon Fuel Standard (LCFS) Program

In addition to California, the CFS policy has been adopted by Oregon, British Columbia, and Washington, each mirroring the version in California but reflecting differences through each market setting. [The Oregon Clean Fuels program \(CFP\)](#) emphasizes the importance of integrating MHD EVs into GHG reduction goals and implemented an [advanced crediting program](#) for fleets currently participating in pilot programs with a minimum requirement of one EV purchase. Credits are generated quarterly when the fleet reports the electricity used to power its vehicles. The rate of credit generation may seem a small initiative until enough credits are generated to sell them and reinvest the revenue into more EVs. Through the advanced crediting program, once a vehicle is put into service, an eligible fleet manager can request the Department of Environmental Quality issue credits up to six years in advance. Other states like Minnesota, New Mexico, Michigan, and New York have either considered or have already introduced bills proposing CFS implementation.

### Illinois CFS Policy Design Considerations

As Illinois takes the steps to implement a CFS policy, state policymakers must incorporate MHD electrification into the policy design. Charging these EVs can generate significant credits and increase MHD EV adoption. The state should start by considering flaws and lessons learned from other CFS policies. For instance, experts have suggested that California's LCFS should improve its carbon accounting by ending "avoided methane" crediting for factory farm gas in 2024, which would [more than double](#) the amount of LCFS incentives that go towards EVs between now and 2030 from \$15 billion to \$34 billion. Given that Illinois is one of the top ten agriculture-producing states, factoring in how CI is calculated will determine how expansive credits for MHD EV charging will be. Furthermore, there is broad interest at the local level in ensuring that MHD vehicle pollution is addressed efficiently in the state through a CFS policy. Therefore, policymakers must also ensure that stakeholder input from groups like the [Environmental Law & Policy Center](#), [Illinois Alliance for Clean Transportation](#), [NETZ Illinois](#) and other advocacy groups are included in the design process.

### Equity and Other Considerations

A CFS makes cleaner fuels more affordable and polluting fuels more expensive. However, existing inequalities will increase if low-income people are left driving older, inefficient, and polluting cars. An equitable path to clean fuels and transportation electrification must ensure that those costs are shared

[Union of Concerned Scientists: Clean Fuel Standards. \(2020\).](#)  
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fairly and that all communities benefit, especially those historically overburdened by transportation pollution. A percentage of the financial value of credits should be invested back into communities of color, low-income communities, and other communities that have been most adversely impacted by transportation pollution.

Oregon's Clean Fuels Program is currently leading the way in embedding equity into the electrification process. The state's DEQ selected the [Forth Mobility Fund](#) to be the backstop aggregator and works with them to collect unclaimed credits and design programs that promote and support transportation electrification across the state. An example of a resulting program is the [Electric Tractor Program](#), funded with \$27,300 from the \$79,200 credit revenue generated in 2020. The program aims to increase awareness, knowledge, access, and adoption of electric farm equipment. The piloted tractors are installed with remote sensors to allow the team to measure potential cost savings and collect data on tractor use cases. The project aims to address the slow adoption of electric farm equipment, that is, MHD EVs, both in the agriculture sector and, more broadly, rural Oregon. Lessons learned from this pilot will help advance the electrification of farm equipment while the project's planned outreach and education events hope to also draw attention to the benefits of overall MHD vehicle electrification. This outlined example is only a sneak peak of what CFS standards can be. An Illinois CFS program should have even more of an equity focus in the future than current models.

[Union of Concerned Scientists: Clean Fuel Standards. \(2020\).](#)  
[eIQ Mobility: How Fleets Can Harness California's LCFS Credits. \(2022\).](#)  
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