



August 28, 2023

Board of Environmental Protection
Maine Department of Environmental Protection
17 State House Station
32 Blossom Lane
Augusta, Maine 04333-0017

**Clean Transportation
Technologies and Solutions**

www.calstart.org

RE: Chapter 128: Advanced Clean Trucks Program

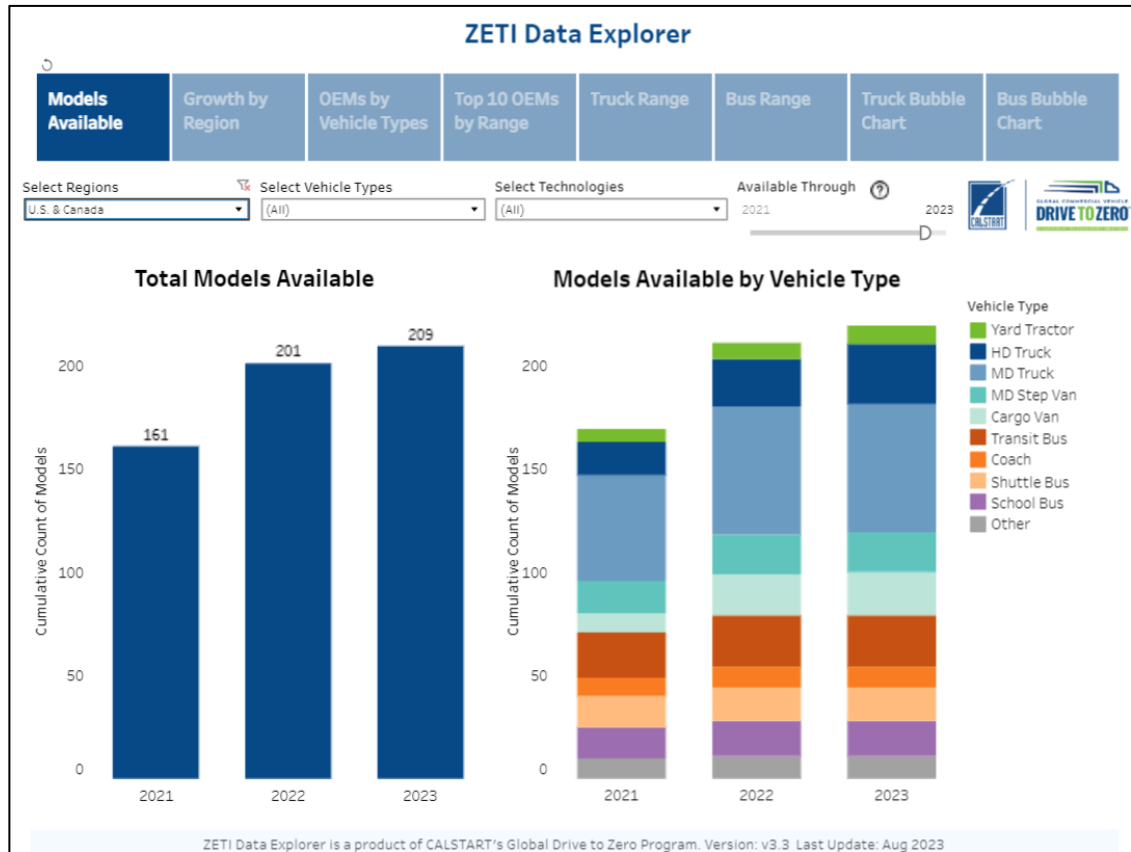
Dear Board Members,

CALSTART is pleased to support Maine's proposed adoption of Advanced Clean Trucks (ACT) and Advanced Clean Cars II (127-A), regulations CALSTART sees as catalysts for the transition of commercial vehicles to be zero-emission. For more than 30 years, it's been [CALSTART's](#) mission to develop, assess, and implement large-scale zero-emission transportation solutions to mitigate climate change and support economic growth. CALSTART works with businesses, organizations, governments, and communities to create real-life impacts towards clean air and equitable access to clean transportation for all. CALSTART provides scientific, technical, and policy support for governments on all levels for regulatory development and clean technology and infrastructure acceleration.

While CALSTART is equally supportive of the Advanced Clean Cars II rule, CALSTART's written testimony will focus on the benefits of Advanced Clean Trucks. The ACT rule will help bring down costs for zero-emission medium- and heavy-duty vehicles by requiring manufacturers to increase model availability to meet the needs of fleet operators and driving investment in clean transportation research and development. This will enable cost-effective electrification of commercial vehicles at the pace and scale needed to meet climate and air quality goals, while delivering public health and economic benefits for communities and businesses alike.

This is a unique point in history as rapid technological innovation in the zero-emission truck industry provides a critical opportunity to transition the heavy-duty transportation sector to zero emission vehicles. Globally, there are 843 different models of zero-emission vans, trucks and buses commercially available, and 209 available in the U.S. and Canada, with new models being introduced at an unprecedented rate.¹ This regularly updated list of commercially available medium- and heavy-duty electric vehicles can be found via CALSTART's [Zero-Emission Technology Inventory \(ZETI\) Data Explorer](#), which can be used to identify available vehicles by applying various filters including vehicle class, manufacturer, and range.

¹ <https://globaldrivetozero.org/tools/zeti-data-explorer/> (accessed August 28, 2023)



Found at: <https://globaldrivetozero.org/tools/zeti-data-explorer/>

As battery prices fall and technology continues to improve, the total cost of ownership is expected to result in vehicle economics that surpass combustion-based alternatives for a rapidly growing range of use cases. A recent analysis found new tax incentives adopted in the historic IRA will enable purchase price parity for a wide range of heavy-duty zero-emission vehicles (ZEVs) at least 5 years, and as much as 12 years earlier, than would occur without the credit.² To ensure that electric trucks have convenient access to fast charging along their routes, CALSTART is working with industry partners, charging providers and utilities on a commercial charging corridor along I-95 from Maine to Georgia.³

Maine's efforts to prepare for the adoption of these regulations is notable in the publication of the Maine Clean Transportation Roadmap⁴ as well as the state's commitment to Multi-State Medium and Heavy Duty Zero Emission Vehicle MOU.⁵ The ACT rule sets a gradual and predictable glide path for the deployment of medium- and

² <https://www.erm.com/public-information-sites/analysis-of-zev-bau-scenarios-for-edf/>

³ <https://content.govdelivery.com/accounts/USEERE/bulletins/348f531>

⁴ <https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf>

⁵ <https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf>



heavy-duty electric vehicles. That adoption curve can be incorporated into the ongoing, multi-stakeholder discussions conducted through Maine’s Integrated Grid Planning process.⁶ Through this public process, Maine’s “transmission and distribution utilities conduct grid planning to predict how much electric demand (“load”) there will be, whether their current assets and equipment are sufficient to meet that need, and, if not, what investments will be required. Stakeholder engagement in the grid planning process provides an opportunity to ensure that the grid will meet Maine’s needs in the coming years. This is an opportunity to address the challenges posed by climate change and aging infrastructure while creating a more resilient, modern, clean, and affordable grid where customers are empowered to make energy decisions.” Maine will have ample time to plan for new load, the state’s utilities are already supporting these efforts through publication of load hosting capacity maps,⁷ and with coordinated efforts, additional load can result in grid and ratepayer savings by creating a smoother load profile with less costly peaks. Further, the gradual nature of electric truck deployment will allow for a cost-effective phasing in of charging structure, enabling the optimization of grid investment and minimizing system costs.⁸

Should DEP move forward with the adoption of these rules, CALSTART also encourages Maine to consider creating, in parallel, voucher incentive programs, e.g. “cash on the hood” for MHDV vehicles, and even infrastructure.⁹ As Maine knows from experience running the Efficiency Maine Trust EV rebate program¹⁰, robust purchase incentives are critical to offset the initial cost differences of zero emission vehicles, particularly the larger classes of vehicles, through at least the early compliance years. Maine could build on the existing rebate program by establishing a robust [Voucher Incentive Program](#) (VIP) for electric trucks with funding now available from the Infrastructure Investment and Jobs Act (IIJA). Incentives should be structured with straightforward requirements that avoid measures that have limited program accessibility in other jurisdictions, such as scrappage requirements; while requiring removal of older and higher polluting diesel engines is a worthy goal, this often provides a barrier to adoption. Existing programs in the region include: the New York Truck Voucher Incentive Program, Massachusetts’s Massachusetts Offers Rebates for Electric Vehicles (MOR-EV Trucks), and New Jersey’s Zero-Emission Incentive Program.¹¹ CALSTART also recommends the creation of a technical assistance program to inform and educate fleets about electrification and ease the burden of transition planning. Technical assistance programs are proven to be helpful tools for fleet education and acceleration of electrification goals; a best practice includes tying technical

⁶ <https://www.maine.gov/energy/initiatives/gridplanning>

⁷ https://www.cmpco.com/w/transmission-and-distribution-maps?p_l_back_url=%2Fsearch%3Fq%3Dthree%2520phase

⁸ <https://calstart.org/wp-content/uploads/2023/08/Phasing-in-U.S.-infrastructure-brief-082223.pdf>

⁹ <https://calstart.org/voucher-incentive-programs-2023/>

¹⁰ <https://www.energymaine.com/electric-vehicle-rebates/>

¹¹ https://calstart.org/wp-content/uploads/2023/05/Voucher-Incentive-Programs-A-Tool-for-Zero-Emission-Commercial-Vehicle-Deployment_new.pdf



assistance programs to available vehicle incentives. An innovative approach to technical assistance and incentives may be to structure incentives such that fleets who participate in a technical assistance program receive a higher percentage of available incentives.

The ACT rule will go a long way toward making sure all Maine residents can breathe clean air, especially those in disadvantaged communities. Market transformation requires an “ecosystem” of regulations, incentives, infrastructure support, and other policy direction. CALSTART strongly supports the adoption of the Advanced Clean Trucks (ACT) in Maine and applauds the State’s leadership to curb dirty gas and diesel emissions.

Sincerely,

Alissa Burger
Regional Policy Director, CALSTART
aburger@calstart.org

Jordan Stutt
Sr. Director, Northeast Regional Office
CALSTART
jstutt@calstart.org