

## Environment Committee JOINT FAVORABLE REPORT

**Bill No.:** HB 5039  
AN ACT CONCERNING MEDIUM AND HEAVY-DUTY VEHICLE EMISSION  
**Title:** STANDARDS.  
**Vote Date:** 3/28/2022  
**Vote Action:** Joint Favorable Substitute  
**PH Date:** 3/11/2022  
**File No.:**

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### **SPONSORS OF BILL:**

[Rep. David Michel, 146th Dist.](#)  
[Rep. Michael A. Winkler, 56th Dist.](#)  
[Sen. Will Haskell, 26th Dist.](#)  
[Rep. Brandon Chafee, 33rd Dist.](#)  
[Rep. Frank Smith, 118th Dist.](#)  
[Rep. Josh Elliott, 88th Dist.](#)  
[Rep. Anne M. Hughes, 135th Dist.](#)  
[Rep. Kevin Ryan, 139th Dist.](#)  
[Sen. Saud Anwar, 3rd Dist.](#)  
[Rep. Gary A. Turco, 27th Dist.](#)  
[Rep. Jennifer Leeper, 132nd Dist.](#)  
[Rep. Amy Morrin Bello, 28th Dist.](#)  
[Rep. Kate Farrar, 20th Dist.](#)  
[Rep. John-Michael Parker, 101st Dist.](#)  
[Sen. Christine Cohen, 12th Dist.](#)  
[Rep. John K. Hampton, 16th Dist.](#)  
[Rep. Mary M. Mushinsky, 85th Dist.](#)  
[Sen. Rick Lopes, 6th Dist.](#)  
[Rep. Aimee Berger-Girvalo, 111th Dist.](#)

### **REASONS FOR BILL:**

This bill is one of the legislatures Governor's bills. Its main focus is to implement the budget recommendations made from the Governor's office. For the Environment committee, the budget recommendations included having DEEP adopt California light duty motor vehicle emission standards for vehicles with a model year 2008 or later. This is done with the federal Clean Air Act implementations in mind and gives the Commissioner of DEEP the ability to establish programs in compliance with these standards.

## **RESPONSE FROM ADMINISTRATION/AGENCY:**

### **Katie Dykes, Commissioner of the Department of Energy and Environmental Protection:**

Writes in support of this bill. Says that the bill will add to the Departments capabilities when combating climate change, emissions, and health issues in the state. They note that the effects of asthma are prominent and especially prevalent in some of Connecticut's biggest cities and emissions from transportation only add to those problems. Says this bill will give us tools to fight back against these issues and move our state in a positive direction.

## **NATURE AND SOURCES OF SUPPORT**

### **Richard Angle, Guilford CT:**

Large trucks and buses only account for about 6% of vehicles in the state but they account for nearly 25% of transportation-related greenhouse gas emissions. The state must exhaust all programs to reduce emissions to provide cleaner air.

### **Justin Backal Balik, State Policy for Transportation Electrification:**

It is an opportunity to become a national leader in electric vehicle deployment and this bill can help us reach our zero-emissions goals. Switching to electric school buses and other zero-emissions vehicles will create good-paying jobs in a rapidly expanding industry. According to DEEP more than 150 zero-emission MHDV models are due to hit the road by 2032. That means that a workforce of trained individuals will be needed to manufacture, operate and maintain these vehicles.

### **Laura Bozzi, Yale Center on Climate Change and Health:**

This bill would help make necessary progress toward the states zero-emissions goals. Ground-level ozone is dangerous to health including chronic obstructive pulmonary disease and asthma which could increase the risk of premature death. Connecticut has the opportunity to join New York, New Jersey, Massachusetts, Oregon and Washington in leading the nation to addressing the human health, environmental and climate challenges of MHD vehicles.

### **Lori Brown, Executive Director, Connecticut League of Conservation Voter:**

The transportation sector is a large contributor to state emissions and this bill would help combat that. The most recent Greenhouse Gas Emissions Inventory issued makes it clear that we are not on track to meet our 2030 emissions targets. Individuals who live near roadways are at a greater risk for health impacts from poor air quality including asthma, cardiovascular disease, and impaired lung development in children. Every step we take toward reducing our transportation is a step toward environmental justice.

**Alissa Burger, Regional Policy Director, CALSTART:**

The committee should view this as a starting point, not a finish line. We offer four recommendations:

- 1) Signaling intent to adopt a fleet purchase requirement, once California's Advanced Clean Fleets rule has been promulgated.
- 2) Robust purchase incentives are critical to offset the initial cost differences of zero-emission trucks through at least the early compliance years. Connecticut should utilize formula funding and pursue grant funding from the recently passed Infrastructure Investment and Jobs Act.
- 3) Coordination between electric distribution companies and the Public Utilities Regulatory Authority is critical to ensure that electric trucks can be seamlessly interconnected to the grid and charged at rates that are competitive with diesel fueling costs.
- 4) Adoption of a Low-Carbon Fuel Standard is a necessary step as a means to bring down the carbon intensity of transportation fuels by 2030.

**Sean Burke, Policy Manager NECEC**

This bill can help move the state of Connecticut in a positive direction and help implement the ACT and HDO rules with newly given authority. The ACT rule is a market driver that will draw manufacturers to sell clean vehicles and deliver cost savings to Connecticut businesses.

**John Carlson, Ceres:**

Our companies and investors see climate change as a significant risk. More than 70 major businesses, institutions, healthcare systems, employers, and investors signed a letter calling on states across the nation to adopt the ACT rule. We support Connecticut moving forward with passage of this bill and the adoption of the Advanced Clean Truck rule.

**Matt Macunas, Legislative Liaison, Connecticut Green Bank:**

Our understanding of the bill is that DEEP adopt medium and heavy-duty motor vehicle standards used by California and it would be complementary to Section 14 of Senate Bill 4. These vehicles comprise a small percentage of our on road fleet but produce one quarter of the transportation emissions. It is important to decarbonize these vehicles for climate and public health purposes.

**Connecticut College of Emergency Physicians:**

Connecticut has failed to meet federal health-based air quality standards for ground-level ozone (smog), for nearly a half-century. When you look at the driving factors behind smog transportation is a leading cause. This sector alone is responsible for 67% of the nitrogen oxide emissions—a major component of smog. The transportation sector is also the largest source of statewide greenhouse gas (GHG) emissions at 37.4%. Trucks and busses are the worst offenders.

**Aziz Dehkan, Executive Director, CT Roundtable on Climate and Jobs:**

Transportation is the most significant source of greenhouse gas emissions and account for 37.4% of total emissions. The most recent report released demonstrated that Connecticut is failing to meet emission reduction targets.

**Susan Eastwood, Sierra Club CT:**

“For almost forty-five years, Connecticut has failed to comply with the National Ambient Air Quality Standards (NAAQS) for ozone, or smog. Failing to meet those health-based standards has subjected generations of Connecticut residents to adverse health and economic impacts. This past year, Connecticut experienced twenty-one days of unhealthy levels of ozone and documented some of the highest monitored values on the east coast. A recent national report, Asthma Capitals 2021, ranked New Haven (#5) and Hartford (#17) among the 100 U.S. cities where it is most challenging to live with asthma. To comply with that standard and meet our greenhouse gas reduction targets Connecticut needs to reduce emissions from the transportation sector, which is responsible for over 67% of local ozone-forming precursor emissions.”

**Kenny Foscue, North Haven CT:**

The recently released CTDEEP report, An Assessment of Connecticut’s Need to Adopt California’s Medium and Heavy-Duty Vehicle Emission Standards documents “the failure of Connecticut fails to meet both the 2008 and 2015 ozone NAAQS. To comply with the ozone standard and meet Connecticut’s greenhouse gas (GHG) reduction targets, Connecticut needs to achieve emission reductions from the transportation sector, which is responsible for over 67% of ozone-forming precursor emissions in Connecticut.” Adopting HB 5039 would be a major step forward for Connecticut to reduce emissions, improve public health, and move towards a cleaner transportation future.

**Nathan Frohling, Director of External Affairs, The Nature Conservancy**

Emissions from vehicles contribute significantly to the formation of ozone, greenhouse gas (GHG) concentrations, fine particulate matter (PM2.5), and toxic diesel particulate matter. Prolonged exposure to these emissions can cause and worsen asthma, respiratory diseases, cardiovascular diseases, lung cancer, preterm births, and low birth weight infants, premature deaths, and other negative health impacts and disparities. Without aggressive and sustained mitigation policies being implemented, transport emissions could increase at a faster rate than emissions. We have included in our testimony a brief history of key steps affecting Connecticut that make adoption of ACT timely and viable.

**John C. Hall, The Jonah Center for Earth and Art:**

We need to transition as a society to zero emissions and include more active transportation utilizing bicycles and e-bikes.

**Zach Kahn, Senior Policy Advisor, TESLA:**

Tesla’s mission is to accelerate the world’s transition to sustainable energy. We believe the world will not be able to solve the climate change crisis without directly reducing air pollutant emissions—including carbon dioxide (CO2) and other greenhouse gases (GHG)—from the transportation and power sectors. To accomplish its mission, Tesla designs, develops, manufactures, and sells high-performance fully electric vehicles and energy generation and storage systems, and installs, and maintains such systems. Tesla currently produces and sells four fully electric, zero emissions vehicles (ZEVs): the Model S sedan, the Model X sport utility vehicle (SUV), the Model 3 sedan, and the Model Y mid-sized SUV. Tesla will also be introducing a medium duty pickup truck, the Cybertruck, and a Class 8 heavy-duty truck, the Tesla Semi. The Tesla Semi will come in two models with ranges of 300 and 500 miles respectively and will demonstrate that an all-electric truck can meet virtually any duty cycle when paired with the megawatt charging system that Tesla and the industry is developing.

**Shannon Laun, Conservation Law Foundation:**

Connecticut has committed to a clean transportation future by signing on to multi-state agreements to accelerate the adoption of zero-emission vehicles, including medium and heavy duty vehicles. A rapid transition to zero-emission electric vehicles, which generate no tailpipe pollution, is key to decarbonize the transportation sector. As we continue to transition our grid to clean, renewable energy, the emissions from generating electricity are continuing to fall, making electric vehicles even cleaner. A review of economic, air quality and public health impacts associated with reducing air pollution from new medium and heavy-duty (MHD) vehicles conclusively demonstrates that proactively implementing the suite of California emission standards for new MHD vehicles rather than relying on outdated federal regulations will yield significant benefits in Connecticut and help the State meet health-based federal air quality standards and state required climate mitigation targets.

**Reverend Nancy Leckerling, Madison CT:**

The bill needs to contain goals to reduce Vehicle Miles Traveled (VMTs) as statute language from Executive Order 22-3 that mandates the CT Dot produce a plan to reduce BMT's by 2030 as an effective way to address pollution from our transportation system.

**Sharon Lewis, Executive Director, Connecticut Coalition for Environmental and Economic Justice:**

CCEEJ is fighting to ensure that clean air, safe drinking water, and healthy communities are accessible for our communities. More than 330,000 children in Connecticut are transported on school buses to and from school every day. Of the 6,100 school buses used throughout the state, the majority of buses run on diesel fuel. The burdens of diesel exhaust are not borne equally across communities in the state, 20 percent of low-income families own no vehicles and over 70% of children from these families take a school bus to school, as compared to less than 50% of children who regularly ride the bus if their family is able to afford a vehicle. Based on where diesel school buses tend to regularly drive and idle the air pollution in the northeast and mid-Atlantic regions on average is 66% greater for communities of color than white residents.

**Professor Shirley McCarthy, Yale School of Medicine:**

The time to make a change is now and this bill will help protect our states health.

**Amy McLean, Acadia Center:**

States in the Northeast have acknowledge the urgency of the climate crisis by establishing emission reduction targets for 2030. Transportation emissions still remain high now accounting to 43% of total CO2 emissions. The time has come for regional policy in the transportation sector.

**Margaret Miner, Consultant, Rivers Alliance:**

As a longtime advocate for clean water I have learned that air-quality problems translate immediately to water quality problems. The 2018 Connecticut Greenhouse Gas Emissions Inventory, in which the Department of Energy and Environmental Protection tracks emissions from 1990 to 2018, shows transportation as the worst, most polluting sector studied. It was the only major economic sector whose greenhouse gas emissions increased (!) during this period. In vehicle emissions, the constituents of most concern are nitrogen oxides and sulfur dioxide.

**Paulina Muratore, Union of Concerned Scientists:**

The transportation sector is now the largest source of global warming pollution in Connecticut and the key sector to focus on in order to reach climate goals and achieve co-benefits such as clean air and healthier communities. Transportation emissions are responsible for a dual problem: climate pollution and local air pollution. When fossil fuels and oxygen meet in a traditional combustion engine, water and global warming induced carbon dioxide is emitted. Trucks and buses also use more fuel per mile, and drive more miles every year than personal vehicles, resulting in the use of a huge amount of diesel fuel.

**Jonathan Perloe, Cos Cob CT:**

As reported in Forbes magazine "Human-driven climate change is already causing widespread devastation." The IPCC warned that climate change caused by human activity including transportation has led to widespread and dangerous possibly irreversible damage. Bold action is needed to protect the people of Connecticut.

**Chris Phelps, State Director, Environment Connecticut:**

Connecticut is falling behind in its efforts to reduce emissions of carbon dioxide and other pollutants that are fueling global warming and climate change. Transportation remains the single largest source of such emissions. Unless the state acts quickly and decisively to slash emissions of CO2 from tailpipes and other transportation sources, Connecticut will fail to meet its statutorily mandated climate emissions reduction targets. Such failure would only hinder the state's efforts to do its part to reduce emissions and prevent the most catastrophic potential economic and public health and safety threats of climate change.

**Thomas Regan-Lefebvre, Transport Hartford Academy at Center for Latino Progress:**

Over 50% of smog forming NOx pollution can lower your resistance to lung infections and 45% of diesel soot finds its way deep in the lungs results in early death thru cardiovascular diseases. Adopting an electric standard will save lives. Electric truck technology is here to stay and will be cheaper than diesel within just 5 years.

**Charles J. Rothenberger, Save the Sound:**

Deep released a report earlier that highlights the air quality challenges facing Connecticut and the benefits of adopting the California Advanced Clean Truck and Low NOx Omnibus rules. By adopting California's standards we will ensure that zero-emission trucks will be available for sale and use and our citizens will share in the benefits of reduced emissions and cleaner air.

**Peter Schweinfurth, Chair, Town of Greenwich Energy Management Advisory Committee:**

In 2021 The Town of Greenwich Board of Selectman established an Energy Management Advisory Committee. The committee is actively exploring the addition of electric vehicles to our town fleets. Zero emission standards for medium and heavy-duty vehicles will provide an impetus to manufacturers to offer these alternative vehicles to customers like Greenwich.

**Brendan Sharkey, Area Cooperative Educational Services**

As a regional education service center established by general statutes our mission is to provide education-related service to the 25 school districts within Greater New Haven and Waterbury. ACES has already in October 2021 unveiled the first full-sized electric school bus in the state thanks to a grant from the DEEP. Thru our programs we offer technical support, project design, installation and power management services to school districts interested in electrifying their transportation systems. Attached is a brief slide deck that explains our program.

**Kimberly Stoner, New Haven CT:**

There is a lot of misinformation that the environmental cost of building electric vehicles makes them less environmentally friendly than internal combustion vehicles. I have included a link to a report on the life cycle analysis of electric vs internal combustion cars.

<https://www.ucsusa.org/resources/cleaner-cars-cradle-grave>

**Tom Swan, Executive Director, Connecticut Citizen Action Group:**

In response to Executive Order 21-3 this bill is needed and can significantly improve air quality and public health just by adopting new emission standards for medium and heavy-duty vehicles offered for sale by 2026.

**Tom Van Heeke, Senior Environmental Policy Advisor, Rivian Automotive: \**

As a manufacturer of medium-duty electric vehicles we support the bill. Rivian applauds this effort to permit the Department of Energy and Environmental Protection (“DEEP”) to adopt regulations governing medium- and heavy-duty (“MHD”) vehicle emissions as part of a comprehensive strategy for improving air quality and addressing climate change. The transition from fossil fuels to electric transportation is critical. Rivian strongly supports programs of ambitious emissions regulation and ZEV sales. HB 5039 would allow DEEP to adopt MHD emissions regulations pioneered by California such as the Advanced Clean Trucks (“ACT”) rule, which requires a growing percentage of MHD sales to be ZEVs, as a key strategy for driving critical emissions reductions in the transportation sector. The ACT regulation was developed by California after several years of intensive stakeholder input from parties including conventional vehicle manufacturers.

**Lynn Werner, Executive Director, Housatonic Valley Association:**

The bill would lead to clean trucks and school buses by allowing Connecticut to adopt California’s medium and heavy duty emission standards including the Advanced Clean Truck Rule (ACT) and the Heavy-duty Omnibus NOx Rule (HDO). Transportation accounts for 37% of Connecticut’s greenhouse gas emissions – the largest source of emissions in the state. This would also improve public health, especially for people in low income and minority neighborhoods near highways and major roads.

**More than 50 people submitted testimony in support of the bill**

## **NATURE AND SOURCES OF OPPOSITION:**

### **Jean Cronin, CT Bus Association:**

This bill allows Connecticut to adopt California's medium and heavy duty vehicle emissions standards rather than the current U.S. EPA emissions. By placing our vehicle standards in the hands of the California Air Resources Board (CARB) we have no control over a mandate for the electrification of charter buses. The purchase of battery electric will be very costly for Connecticut companies, extending well beyond the initial cost of the vehicle. These vehicles can cost three times as much as diesel fuel based vehicles. Our biggest concern is the push towards electrification and the fact that they will not work for long distance charter trips.

### **Kyle DeVivo, DATTCO Bus:**

We are concerned that the available technology in over the road motorcoaches is far from meeting the necessities for long trips. Heating and cooling cause a significant reduction in the ability for these vehicles to travel long distances. Buses in terms of passenger emissions are already one of the greenest forms of transportation and play a major role in reducing the overall use of fossil fuels. We ask the committee to consider the differences in our state and California the most pertinent of which is climate.

### **Michael S. Giaimo, Regional Director, American Petroleum Institute, Northeast Region:**

API strongly encourages Connecticut to retain jurisdiction over air rules rather than incorporate by reference California standards. This is a prudent and practical approach and ensures a thorough and deliberate debate and rulemaking process before implementing rules from a state whose population density, economics, topography, and climate – all of which impact transportation and transportation-related infrastructure – differ substantially from Connecticut. Given Connecticut's needs may vary from time to time, it makes sense to have the Department of Energy and Environmental Protection and the legislature (through its legislative oversight authority) consider and analyze the appropriate regulations for the state and not simply defer that responsibility to another state's air resources board.

### **David Godbout:**

Writes in opposition of the bill on constitutional grounds.

### **Christian A. Herb, President, Connecticut Energy Marketers Association**

This bill is an unfunded mandate that will place a burden on local family owned businesses who use medium and heavy-duty vehicles. The legislature must not cede their authority to another state's legislature. Connecticut should continue to follow the United States Environmental Protection Agency (EPA) rules so that we can continue to remain in line with most of the rest of the country

### **The Lumber Dealers Association of Connecticut:**

The move to zero-emissions vehicles is a long-term goal LDAC embraces, but it must be implemented under a realistic timeframe, and it must be partnered with substantial government support that would help businesses reach the objective without imposing a financial mandate on the those who rely on these types of vehicles every day. It is critical to ensure that available vehicle technology will offer sufficient battery runtime, provide enough charging options and recognize the role the high price tag will play in compliance.

**Brian P. Moran, New England Convenience Store & Energy Marketers Assoc.** : Writes in NECSEMA is opposed to establishing mandates for any alternative fueled vehicle sales. Mandates will jeopardize our state's regional competitiveness, and result in price increases that will be passed onto everyone in the state, by businesses that rely on these vehicles for delivery of materials or bringing their goods and services to market. Adopting this regulation ignores the reality that every major and new auto and truck manufacturers in the world are on track to produce hundreds of new ZEV models.

**John Nichols, Executive Director, Connecticut Farm Bureau Association:**

We support any initiatives to reduce emissions but are concerned about the increased cost to our farmers to invest in the vehicles that would meet the standards mandated in this bill. We would like to request an exemption for all agricultural products and inputs from the truck mileage tax passed during the 2021 legislative session.

**Mike Paine, President, Paine's Recycling and Rubbish Removal Inc.**

We object to the bill for the following reasons:

- The Engine Manufacturers Association calculates that a California-compliant diesel truck will cost \$57,905 more than an EPA-compliant diesel truck
- CA standards also contain a phased-in electric truck sales mandate. A medium duty electric truck will cost 2.5 times more than its diesel counterpart (about \$130,000 difference), and a heavy-duty will cost 3 times more than its diesel counterpart (about \$276,000 difference).
- Trucks registered in other states that do not have to comply with this standard will operate in and through Connecticut anyway.
- It would take 60 of today's trucks to equal the emissions of just one truck from 30 years ago. Federal standards have the industry making tremendous progress.
- The Biden administration JUST proposed new rules that will further reduce NOx emissions by 90%.

If this bill goes forward trucks and jobs will be pushed out of state and businesses will operate older trucks longer.

**Joseph R. Sculley, Motor Transport Association of CT:**

- The Engine Manufacturers Association calculates that a California-compliant diesel truck will cost \$57,905 more than an EPA-compliant diesel truck. CA standards contain a phased-in electric truck sales mandate. Therefore a medium duty electric truck will cost 2.5 times more than its diesel counterpart (about \$130,000 difference), and a heavy-duty will cost 3 times more than its diesel counterpart (about \$276,000 difference). A rough estimate shows \$951 million in total incremental costs will be incurred. Even if vouchers were provided to cover just half of that amount, that would require \$475.5 million in vouchers. CT very likely does not have the money for this, which DEEP acknowledged in their 2020 EV roadmap. This estimate does not even include the amount required for charging infrastructure, which is roughly \$40,000 to set up power, plus another \$40K - \$50K for each station, which could only handle 2 or 3 trucks. Plus another \$40K for lifts, tools, electronics, etc. . Finally unless the Highway Use Tax is repealed, electric trucks will be paying more than their diesel counterparts because of the weight of the trucks.

**Christopher Ventrella, Westport CT:**

The Independent System Operator of New England warns of blackouts because of the tight supply demand we are currently experiencing. Ratepayers already suffer from some of the highest rates in the country and requiring us to purchase electric powered medium and heavy-duty vehicles is impossible and will cost thousands more.

**Ashley Zane, Government Affairs Associate, CBIA:**

CBIA acknowledges that healthier air quality leads to healthy citizens and a greater capacity for growth in the state. Connecticut bears the burden of other states' pollution activities, and we need to work with other states and the EPA to tackle this problem. Individual states operating with varying levels of environmental regulations are not going to solve the problem. The EPA released a proposal Monday, March 7th that would require the industry to cut nitrogen oxide emissions by up to 90% per truck over current standards by 2031. The new standards would start in 2027 to limit the emissions from nearly 27 million trucks and buses. We encourage the policy makers to do their due diligence in ensuring that Connecticut remains competitive.

**Reported by: Pamela Bianca & William Ginn**

**Date: April 5, 2022**