ALA_MD Clean Trucks Testimony_HB 230.pdf
Uploaded by: Aleks Casper
Position: FAV

American Lung Association Testimony House Bill 230
Environment & Transportation
February 8, 2023
Support

Chair Barve and Members of the Committee:

Thank you for the opportunity to provide comments. **The American Lung Association in Maryland strongly supports House Bill 230 – Clean Trucks Act of 2023.** The Lung Association believes that Maryland must continue to enact policies that will make meaningful reductions in harmful air and climate pollution and ultimately protect the health and well-being of Marylanders. House Bill 230 would be an important step toward health protection.

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease, through research, education and advocacy. The work of the American Lung Association is focused on four strategic imperatives: to defeat lung cancer; to improve the air we breathe; to reduce the burden of lung disease on individuals and their families; and to eliminate tobacco use and tobacco-related diseases.

The American Lung Association's 2022 State of the Air[1] report revealed that four in ten Americans, more than 137 million people live in counties that had unhealthy levels of ozone and/or particle pollution. In Maryland there were mixed results with 54% living in a community with unhealthy levels of ozone or particle pollution. Ozone and particle pollution can harm the health of all Maryland residents and of particular risk are children, older adults, pregnant people, and those living with chronic diseases – approximately 100,000 children and 422,000 adults are living with asthma in Maryland. Both ozone and particle pollution can cause premature death and other serious health effects such as asthma attacks, cardiovascular damage, and developmental and reproductive harm.

Climate change is one of the most urgent threats to human health of the 21st century. Reduction of harmful pollutants caused by burning fossil fuels and other combustion is critical to improving the local health today and ensuring a stable climate for future generations. Climate change is first and foremost a public health issue and one that creates disproportionate impacts across the state's diverse communities. Further, climate change is making the job of cleaning our air much more difficult as temperatures rise and drive conditions for unhealth ozone pollution days, among other health challenges.

The American Lung Association supports measures to reduce all emissions that contribute to climate change. Such measure should include but are not limited to transitioning away from fossil fuels to increased use of clean, non-combustion, renewable energy sources and zero-

emission transportation technologies, expanding energy conservation and efficiency measures and establishing enforceable and science-based limits on emissions for all sectors including industrial, energy, commercial, residential and transportation. We support measures to reduce other outdoor air pollutants while reducing emissions that cause climate change.

The transportation sector is the leading source of air and climate pollutants. The American Lung Association recently issued our Zeroing In on Healthy Air[2] report which finds that a widespread transition to zero-emission vehicles powered by clean energy sources could result in up to 110,000 avoidable deaths and $1.2 trillion in public health benefits across the United States over the next 30 years. In Maryland specifically, the report found that transition to clean energy transportation could have $27.8 billion in public health benefits including 2,530 avoided deaths, 63,600 avoided asthma attacks and 315,000 avoided lost workdays. Achieving these public health benefits requires strong policies and investments at the local, state, and national levels to spur the transition to zero-emission vehicles and non-combustion, electricity generation. The transition to zero-emission technologies would benefit residents across the United States and in Maryland and especially those most burdened by power plants and transportation hubs like highways, ports, and warehouses therefore policies should be enacted to support this transition as House Bill 230 proposes to do.

More specific to the benefits of zero-emission trucks, the Lung Association recently issued Delivering Clean Air: Health Benefits of Zero-Emission Trucks[3] that examined the health benefits of transitioning to zero-emission trucks and power generation in counties impacted by major trucking routes. Heavy-duty trucks deliver major doses of pollution to communities throughout the United States along with their cargo. The report indicated the transition to zero-emission trucking in communities with heavy trucking traffic could generate $735 billion in public health benefits, 66,800 in fewer premature deaths, 1.7 million fewer asthma attacks and 8.5 million fewer lost workdays. Maryland specifically could see $19.8 billion in health benefits, 1,803 avoided premature deaths, 46,875 asthma attacks avoided and 231,260 in lost workdays through the shift to zero-emission trucks and energy. We support Maryland's efforts to accelerate the transition of heavy-duty trucks to zero emission as a significant opportunity to reduce health impacts and disparities in pollution-burdened communities.

The American Lung Association believes that all people are entitled to breathe healthy air and to be free of the adverse health effects of air pollution. We support the protection of all people from the harm of air pollution, especially those who suffer disproportionate exposure from local sources of emissions. We recognize that major sources of air pollution are often located near where many people especially communities of color or lower-income residents, live and work which means their pollution burdens can be more immediate and disproportionally harmful.

The Lung Association strongly supports House Bill 230 as an integral way to address the problem of air pollution in our state and significantly reduce harmful emissions and health disparities. We urge the committee to give a favorable report and pass this legislation through the General Assembly.

We thank you for the opportunity to provide comments and if you need any additional information, please do not hesitate to contact me at aleks.casper@lung.org or 202-719-2810.

Sincerely,

Aleks Casper
Director of Advocacy

[1] American Lung Association. State of the Air Report, 2022. Available at: https://www.lung.org/research/sota

[2] American Lung Association. Zeroing in on Healthy Air, 2022. Available at: https://www.lung.org/clean-air/electric-vehicle-report#

[3] American Lung Association. Delivering Clean Air: Health Benefits of Zero-Emission Trucks, 2022. Available at: https://www.lung.org/getmedia/e1ff935b-a935-4f49-91e5-151f1e643124/zero-emission-truck-report

HealthyAirFactSheet_Maryland_Final.pdf
Uploaded by: Aleks Casper
Position: FAV

American Lung Association.

Healthy Air
Fact Sheet

State of the Air 2022

More than 4 in 10 Americans breathe unhealthy air. In Maryland, it's worse. 54% of Marylanders live in counties impacted by air pollution. Tailpipe emissions and record heat drive up ozone pollution, while prolonged drought conditions and other impacts from climate change, such as historic wildfires, contribute to particle pollution.

The American Lung Association's **State of the Air** 2022 report finds Maryland is home to significant air pollution challenges.

Maryland has **522,982** adults and children **with asthma.**

54% live in a community with **unhealthy levels of ozone or particle pollution.**

3.3 Million live in a community with **unhealthy levels of ozone or particle pollution.**

Poor air quality contributes to a wide range of negative health impacts, including childhood asthma attacks, impaired lung function and development, lung cancer, heart attacks and strokes, and premature deaths. Many Marylanders, especially those in lower-income communities and communities of color, often face disproportionate impacts due to multiple, local sources of pollution.

Zeroing in on Healthy Air

Moving away from combustion to zero-emission technologies is critical to clean air, health equity and a healthy climate. The American Lung Association's **Zeroing in on Healthy Air** report finds that a widespread shift to zero-emission transportation and clean energy would yield major health benefits between 2020 and 2050.

The widespread transition to zero-emission cars, buses, trucks and clean energy would yield billions in avoided health costs and climate change impacts in Maryland.

MARYLAND

Health Impacts Avoided (2020-2050)

- **Premature Deaths:** 2,530
- **Asthma Attacks:** 63,600
- **Lost Work Days:** 315,000

- **Public Health Benefit:** $27.8 Billion

Taking Action = **Clean, Healthy Air for All**

State policies must ensure a rapid shift to zero-emission transportation and non-combustion energy so that all communities can breathe cleaner, healthier air. To achieve this, Maryland should move quickly to:

- **Accelerate the deployment of zero-emission vehicle infrastructure** and non-combustion renewable energy resources.
- **Adopt the Advanced Clean Truck (ACT) standard** to ensure health and equity benefits of increasing sales of zero-emission trucks over the coming decade.
- **Adopt the Advanced Clean Cars II (ACCII)** to deliver the health benefits of 100 percent zero-emission passenger vehicle sales by 2035.

American Lung Association Poll

Americans want stronger standards to protect the environment, reduce air pollution and transition toward zero-emission vehicles.*

88% support the Environmental Protection Agency enforcing stronger air-quality standards.

85% say protecting the environment and growing the economy go hand-in-hand.

72% support significant investments in zero-emission vehicles as part of our efforts to rebuild the economy.

70% agree the federal government should implement policies supporting a transition to zero-emission vehicles.


Baltimore, Maryland

"A nationwide transition to electric vehicles is urgently needed to improve lung health and advance health equity. Policies to eliminate emissions from cars, trucks, buses and delivery vans are a win-win. Zero-emission vehicles curb climate change and provide immediate benefits to health at the same time."

Harold Wimmer, National President and CEO
American Lung Association
Electric Vehicle Poll, June 2021

*Source: American Lung Association/Global Strategy Group – June 2021

Rivian_CommitteeSupportLetterACTBill_House_FINAL.p
Uploaded by: Beau Whiteman
Position: FAV

February 8, 2022

Environment and Transportation Committee
Room 251
House Office Building
Annapolis, MD 21401

Re: Support for HB 230, Clean Trucks Act of 2023

To the Environment and Transportation Committee,

Thank you for the opportunity to submit this letter in support of HB 230. Rivian Automotive, LLC ("Rivian") strongly supports the Advanced Clean Trucks ("ACT") regulations and encourages the state of Maryland to take the necessary steps to establish the rules. This could include legislative action by passage of HB 230 directing the Maryland Department of the Environment ("MDE") to initiate a rulemaking in 2023.

Founded in 2009, Rivian is an independent U.S. company with more than 13,000 employees worldwide. It is Rivian's mission to Keep the World Adventurous Forever. Our focus is the design, development, manufacture, and distribution of all-electric adventure vehicles, specifically the R1T pickup, R1S 7-passenger SUV, and a commercial last-mile delivery van for Amazon. All our vehicle products meet the requirements of the ACT regulations and show the market's readiness for sales requirements on manufacturers that achieve a full transition away from fossil fuel-powered medium- and heavy-duty ("MHD") vehicles.

In the face of climate change, the transition from fossil fuels to electric transportation is critical to ensuring that forever is possible. Rivian strongly supports programs of ambitious emissions regulation and zero-emission vehicle ("ZEV") sales requirements as core to our values and vision for the world. HB 230 would leverage the state's authority under Section 177 of the federal Clean Air Act to direct MDE to adopt the ACT regulations pioneered by California. The rules would establish Maryland as a priority market for MHD ZEVs, thereby driving critical emissions reductions in the state's transportation sector. The ACT rules complement existing standards governing light-duty vehicles, also known as the Advanced Clean Cars program. Maryland has shown national leadership as an ACC state for more than a decade and Rivian looks forward to the state formally adopting the next phase of ACC standards for model years 2026 and beyond.

Setting ambitious, companion requirements for the MHD sector is a critical task. Conventional MHD vehicles contribute disproportionately to GHG emissions and air pollution. Nationwide, MHD vehicles comprise just 10 percent of vehicles on the road but they emit 20 percent of all transportation sector GHGs and more than 60 percent of tailpipe nitrogen oxides (NOx) and particulate matter (PM). In 2020, approximately 60 percent of those NOx and PM emissions occurred in urban areas. That's why electrifying MHD vehicles can have particular benefits for frontline communities, which often neighbor ports, highways, and warehouse districts. According to the International Council for Clean Transportation ("ICCT"), adoption of the ACT rule in Maryland would avoid almost 70,000 tons of NOx, 613 tons of PM2.5, and more than 7 million metric tons of GHG emissions by 2050.[1] These reductions would represent a

[1] The International Council on Clean Transportation, *Benefits of Adopting California Medium- and Heavy-Duty Vehicle Regulations* (2022), available at www.theicct.org/benefits-ca-multi-state-reg-data/.

crucial down payment on ever stronger public health improvements and the achievement of Maryland's larger climate goals. With transportation contributing more to the state's GHG emissions than any other economic sector, the state cannot afford to leave any emissions reductions from vehicles on the table.

Implementing the ACT rule will help catalyze growth in the MHD ZEV market and should be viewed as foundational for any state approach to eliminating emissions from the MHD sector. With its strong yet achievable standards, vehicle class-specific sales targets, and provisions for credit trading, the regulation is thoughtfully designed to support industry's compliance efforts while driving accelerated deployment of EVs by manufacturers. This helps industry grow more quickly and cost-effectively to large-scale production—crucial for the long-term success of the industry as well as Maryland's transportation electrification efforts.

Once again, Rivian applauds the goals of HB 230 and Maryland's broader efforts to electrify transportation. We urge your support for this important bill to put Maryland on a path to being an ACT state by the end of 2023.

Sincerely,

Beau Whiteman
Public Policy Manager
Rivian Automotive, LLC
bwhiteman@rivian.com |814-746-6615

2.08.2023 HB 230 Department of the Environment - Z

Uploaded by: Bee Ditzler

Position: FAV

TESTIMONY TO THE HOUSE ENVIRONMENT AND TRANSPORTATION COMMITTEE

HB 230 Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)

POSITION: Support

BY: Nancy Soreng – President

Date: February 8, 2023

The League of Women Voters of Maryland (LWVMD) supports proposed legislation HB 230 as it will reduce our reliance on fossil fuels and helps to promote a cleaner environment. We have similar standards for passenger cars and it is important for the state to have requirements for the sale of other heavier vehicles.

The reasons LWVMD favors this bill are multiple:

1. By requiring all fleets to meet a reporting requirement we help to actually identify areas with high freight traffic and therefore we help to identify areas with diesel pollution.
2. This is a cost saving and health saving measure by helping to avoid more cases of respiratory illness like asthma in the long term.
3. By helping Maryland meet the requirements for cleaner air with larger vehicles, we help the state to meet our own state environmental standards.
4. Technology is now available to supply the sales of environmentally friendly zero and low emission fleets and more vehicles will be coming on the market in coming years.
5. Gradual implementation of sales of cleaner vehicles is built into the bill and guidelines are concrete.

We know that trucks, buses, and heavier commercial vehicles have a large impact on air quality and impacts all who are exposed. Multiple states have taken action already and it's time for Maryland to pass this bill to require medium and heavy-duty trucks to raise sales standards and codify a timeline of implementation.

LWVMD urges a favorable report on HB 230.

121 Cathedral Street, Suite 2B, Annapolis, MD 21401
410-269-0232 * info@lwvmd.org * www.lwvmd.org

HB 230 Advanced Clean Truck Rule Favorable CMTA.pd
Uploaded by: Brian O'Malley
Position: FAV

Transportation Alliance

February 8, 2023

Testimony on HB 230 –
Clean Trucks Act of 2023
Environment & Transportation Committee

Position: Favorable

The Central Maryland Transportation Alliance supports HB 230.

We urge Maryland to swiftly adopt the Advanced Clean Trucks Rule and Heavy-Duty Omnibus Rule to tackle climate change and improve public health. This bill would direct the Maryland Department of the Environment to do so.

We must now take swift action to make sure we are cutting pollution from the larger vehicles that continue to harm Marylander's health and contribute to the climate crisis. Exhaust from **diesel trucks and buses is a leading source of harmful air pollution** that sends countless Maryland residents to the hospital every year. Though medium- and heavy-duty trucks and buses make up only nine percent of the state's 4.2 million registered vehicles, they contribute a disproportionate 39 percent of nitrogen oxide (NOx) emissions in the state, 48 percent of fine particulate matter (PM2.5), and 21 percent of global warming emissions from all on-road vehicles in the state. Residential neighborhoods located near major roads and highways face disproportionate burdens from traffic and transportation pollution. These neighborhoods are far more often communities of color due to decades of residential segregation, and bear a burden of unsafe pedestrian conditions, higher rates of asthma, and unremitting noise pollution. The harm to human health and the increasingly severe impacts to the climate demonstrate the magnitude of this problem and why it is so imperative to take steps now to address it.

To cut harmful air pollution and meet Maryland's new goal of reducing greenhouse gas emissions 60% from 2006 levels by 2031, Maryland must adopt the Advanced Clean Trucks Rule (ACT) and the Heavy-Duty Omnibus rule (low NOx rule) as quickly as possible. **California, Massachusetts, New York, New Jersey, Oregon and Washington state have already adopted these standards**– and many more states, including Connecticut, are actively considering it.

Adoption of ACT also presents a tremendous opportunity to create a significant amount of

high-quality manufacturing and installation jobs in our state. Deferring consideration and implementation of ACT in Maryland risks ceding ground as a priority market for Zero-Emission Medium-and Heavy-Duty Vehicles. If Maryland doesn't adopt these rules, we would likely lose out on the clean energy economy emerging in other states and the associated benefits. Please seize the opportunity to create good jobs, improve public health and protect future generations by adopting the ACT and low NOx rules.

We urge a favorable report.

HB 230 Department of the Environment - Zero-Emissi
Uploaded by: Cait Kerr
Position: FAV

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy
Maryland/DC Chapter
425 Barlow Pl., Ste 100
Bethesda, MD 20814

tel (301) 897-8570
fax (301) 897-0858
nature.org

Wednesday February 8, 2023

TO: Kumar Barve, Chair of House Environment and Transportation Committee and Committee Members
FROM: Michelle Dietz, The Nature Conservancy, Director of Government Relations; Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst
POSITION: Support HB 230 Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)

The Nature Conservancy (TNC) supports HB 230 offered by Delegate Love. HB 230 will update Maryland's regulations on medium- and heavy-duty vehicle emissions in order to better protect public health and our environment. This bill is consistent with Maryland's commitments under the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding as well as with state emissions reduction goals set by the Climate Solutions Now Act of 2022 (CSNA). Furthermore, the Maryland Commission on Climate Change recommends that the state adopt the Advanced Clean Trucks Rule by this year. HB 230 represents a key step in following through on Maryland's commitments to our residents and to other state governments.

The transportation sector is the largest contributor to climate change in our country, our region, and in Maryland. It accounts for approximately 40% of greenhouse gas emissions statewide, predominately from on-road sources. Gas-powered vehicles also emit air pollutants like particulate matter that harm pulmonary and cardiovascular health. Of the particulate matter that diesel-powered vehicles emit, 80%-95% is 'ultrafine' size, which has the ability to penetrate deep into the lungs and enter the circulation system. Nitrogen oxides from fossil fuel combustion, including diesel exhaust, are the major precursors of ground level ozone, which triggers asthma attacks. These dangerous health risks disproportionately impact Black and brown communities and low-income neighborhoods. Nitrogen oxides contribute to increasing new cases of childhood asthma. According to a recent report from the International Council on Clean Transportation, implementing updated emissions regulations for medium- and heavy-duty vehicles through enacting the Advanced Clean Tucks and the Heavy-Duty Omnibus Rules would bring Maryland over $2.2 billion in public health benefits between 2020-2050, by avoiding over 314 hospital admissions and emergency room visits, 370 premature deaths, and more than 150,000 cases of respiratory illnesses.

Maryland has set ambitious goals to reduce greenhouse gas emissions and combat climate change through the CSNA of 2022. In 2021, the Maryland Department of the Environment modeled the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding and determined that this is a critical contribution to achieving even fifty percent reductions by 2030, which is less than CSNA targets. We need to act now in order to meet our state climate goals and HB 230 will bring us closer to reaching these targets.

We commend Delegate Love on introducing this bill, which would improve public and environmental health in our state by reducing emissions in medium- and heavy-duty vehicles in Maryland.

Therefore, we urge a favorable report on HB 230.

HB0230 Clean Trucks Act FAV.pdf
Uploaded by: Cecilia Plante
Position: FAV

MARYLAND LEGISLATIVE COALITION

TESTIMONY FOR HB0230
Department of the Environment – Zero–Emission Medium and Heavy Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Bill Sponsor: Delegate Love
Committee: Environment and Transportation
Organization Submitting: Maryland Legislative Coalition
Person Submitting: Cecilia Plante, co-chair
Position: FAVORABLE

I am submitting this testimony in favor of HB0230 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of individuals and grassroots groups with members in every district in the state with well over 30,000 members.

This important legislation would require that the Maryland Department of Environment adopt the Advanced Clean Truck rule by December 1, 2023. This rule requires that vehicle manufacturers sell an increasing annual percentage of electrified medium and heavy-duty vehicles including pickup, delivery, and semi-trucks as well as school buses between Model Year 2026 (for states that adopt in 2022) and 2035. These vehicles represent 10% of vehicles on the road but disproportionately contribute to 30% of carbon emissions, 45% of toxic nitrogen oxide emissions, and 57% of health harming particulate matter emitted by the entire transportation sector in the US.

We have to electrify vehicles as soon as possible, and that will not happen without some requirements for it to happen. Manufacturers are disinclined to re-tool their factories and sell electrified vehicles when they are able to sell gas-combustion vehicles.

Under Section 177 of the Clean Air Act, states other than California are not allowed to set their own emissions standards. However, states can choose to follow and adopt vehicle standards that California has enacted. Maryland first adopted California's clean car standards for personal vehicle electrification through legislative action in 2007. Maryland has the opportunity to enact similar standards again and clean up large dirty diesel vehicles that continue to harm our health and exacerbate climate change.

This legislation would help Maryland follow through on its commitment for 30% of all medium and heavy-duty vehicles sales to be electric by 2030 and could create high quality green jobs in the process. Maryland would also be included in the growing number of states adopting the Advanced Clean Truck Rule, including California, Massachusetts, New York, New Jersey, Washington, and Oregon.

We support this bill and recommend a **FAVORABLE** report in committee.

FAVORABLE HB 0230 MD ZEV House Testimony Berg Wedn
Uploaded by: Christine Berg
Position: FAV

HB 0230: Zero-Emission Truck Act of 2023
Date: February 8, 2023
Committee: House Environment & Transportation
Position: FAVORABLE

Christine D. Berg, M.D.
Oncologist

As a concerned oncologist, internationally recognized in cancer screening, I respectfully submit the following public comments in **FAVOR** of HB 0230 the Zero-Emission Truck Act of 2023. This is a robust bill that will significantly lower emissions from medium- and heavy-duty trucks in Maryland. I would like to particularly acknowledge my D16 Delegate Love who is the House Sponsor and the co-sponsors Fraser-Hidalgo, Charkoudian, Foley, Guyton, Moon, Queen, Terrasa, Turner and Vogel.

Importantly, zero-emission trucks will not have CO2 emissions which are the leading greenhouse gas contributing to the devastating health effects being experienced from climate change. Of concern to all of us, our friends and loved ones is the effect of worsening climate change on the risks of developing cancer, adverse effects on survival from cancer, and increases in the risk of cancer patients suffering from other diseases such as infections. As an oncologist it is my goal to raise awareness of these issues and help to mitigate them. Two peer-reviewed manuscripts I have co-authored document these worsening impacts[1,2].

Additionally, the fine particulate matter, primarily PM 2.5, which is included in diesel exhaust, is responsible for nearly 1 in 6 lung cancer cases worldwide[3]. While lung cancer survival is improving with improved treatment and early detection, for which my research was instrumental for implementation, it still remains poor[4]. These types of pollutants are also linked to numerous other respiratory and cardiovascular diseases such as asthma, emphysema, and heart attacks. When inhaled, PM2.5 impacts the entire length of the respiratory tract, from tracheobronchial tree to the air sacs (alveoli) in the lungs. Polyaromatic hydrocarbons bind to PM2.5 and cause oxidative damage and low-grade, chronic inflammation, resulting in DNA adducts and gene mutations, among other molecular changes[5]. This also worsens viral respiratory infections by various mechanisms[6], including impairment of the immune response, damage of the cilia in the respiratory tract, and intracellular oxidative stress. Another recent study published in Nature Aging showed that short-term exposure to polluted air, even at levels generally considered "acceptable," can impair mental ability in the elderly[7].

Nitrous oxide is another harmful pollutant from our transportation system that has dramatic health consequences. When combined with volatile organic compounds (VOCs), the reaction creates ozone in the presence of sunlight and heat. Exposure of healthy individuals to relatively low ozone concentrations can cause harmful respiratory conditions and cardiopulmonary impacts, including lung irritation, breathing difficulties, reduced lung capacity, aggravated asthma, COPD, and increased mortality from cardiopulmonary and lung disease[8]. Millions of Americans suffer from the harmful effects of ground-level ozone pollution —be they children too

sick to go to school, high school football players not allowed to practice outdoors in the summer, 65-year-olds with lung disease unable to take a walk in the park, or farmers at risk when they harvest their fields[9]. Ozone pollution will also worsen as climate change worsens.

In one year, in the Northeast and mid-Atlantic alone, tailpipe-related pollution caused an estimated 7,100 premature deaths[10]. According to a study, many of these deaths were from the pollution that crosses state lines. The authors said that this new, detailed modeling of the damages from specific pollutants and classes of vehicles could help policymakers target regional efforts and replicable efforts (such as the ACT rule) to curb interstate transportation pollution[11]. An additional study by the Clean Air Task Force focusing on Maryland, see Figure attached, documents adverse health effects localized to Maryland from diesel exhaust here in the state[12].

Based on my discussions with transportation and climate change experts, including at the Union of Concerned Scientists, I am confident this Act is a reasonable policy solution to meet our mutual goal of improving the health of Maryland residents while also curbing climate change which has additional negative health consequences. By joining with other states in our region, who have passed this legislation, Vermont, Massachusetts, New Jersey, and New York, this will serve as a model for all states to reduce a significant source of particulate and greenhouse gas emissions. Maine and Rhode Island are also considering this.

In summary, I urge a **FAVORABLE** vote on HB 0230 Zero-Emission Truck Act of 2023,

Sincerely,

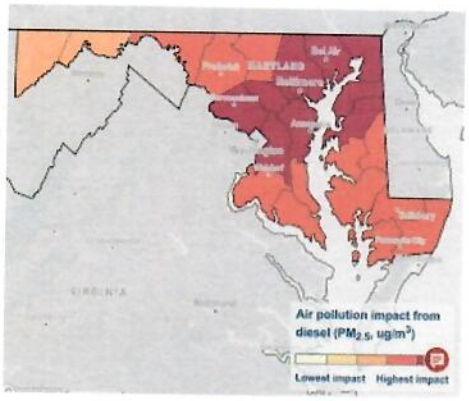
Christine D. Berg, M.D.

Christine D. Berg, MD
8003 Greentree Road, Bethesda, MD 20817
drchrisberg@outlook.com
301-908-0398 (cell)

Note: The ideas expressed in these written comments are solely my own and do not express the views or opinions of my employers.

FIGURE

Health Effects of Diesel | Maryland



Annual Projected Impacts in 2023: Health		
Deaths	186	# of deaths
Heart Attacks	73	# of heart attacks
Acute Bronchitis	115	# of cases
Upper Respiratory Symptoms	2,088	# of cases
Lower Respiratory Symptoms	1,462	# of cases
Emergency Room Visits, Asthma	48	# of visits
Asthma Exacerbation	2,149	# of cases
Lifetime Cancer Risk Per Million	246	# of cases per million people

Clean Air Task Force https://www.catf.us/work

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10. https://www.edf.org/sites/default/files/documents/TransportationWhitePaper.pdf
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12. *Clean Air Task Force https://www.catf.us/work*

SB 224 - HB 230.pdf
Uploaded by: Dave Arndt
Position: FAV

February 2, 2023

Testimony on SB 224/HB 230

Clean Trucks Act of 2023

Position: Favorable

Dave Arndt of Baltimore MD supports SB 224/HB 230

Hello,

I live in Baltimore where we have several interstates, port facilities and large distribution warehouses.

Areas with the most truck traffic have a higher rate of asthma and a lower lifespan, by up to 15 years, than the other residents of Baltimore who live away from these diesel generating sources.

This proposed legislation would require that the Maryland Department of Environment adopt the Advanced Clean Truck rule. This rule requires that vehicle manufacturers sell an increasing annual percentage of medium and heavy-duty vehicles including pickup, delivery, and semi-trucks as well as school buses. These vehicles represent 10% of vehicles on the road but disproportionately contribute to 30% of carbon emissions, 45% of toxic nitrogen oxide emissions, and 57% of health harming particulate matter emitted by the entire transportation sector in the US.

Maryland first adopted California's clean car standards for personal vehicle electrification through legislative action in 2007. Maryland has the opportunity to enact similar standards again and clean up large dirty diesel vehicles that continue to harm our health and exacerbate climate change. This will save lives and increase the quality of life for thousands of Maryland residents. Let's not leave anybody behind.

I encourage a FAVORABLE report for this important legislation.

Thank you,

Dave Arndt
1445 Haubert St.
Baltimore MD, 21230
240-328-7383

Testimony HB0230 Clean Trucks Act of 2023-MoCoCAP
Uploaded by: Debbie Cohn
Position: FAV

Committee: Environment & Transportation
Testimony on: HB0230 - Dept. of Environment-Zero-Emission Medium and Heavy Duty Vehicles-Regulation (Clean Trucks Act of 2023)
Organization: Montgomery County Climate Action Plan Coalition (MoCo CAP Coalition)
Submitting: Deborah A. Cohn; Diana J. Younts
Position: Favorable
Hearing Date: February 8, 2023

Dear Mr. Chairman and Committee Members:

Thank you for allowing our testimony today. The MoCo CAP Coalition (Montgomery County Climate Action Plan Coalition) is a county-wide coalition dedicated to helping Montgomery County achieve its goal of reducing greenhouse gas emissions by 80% by 2027 and 100% by 2035. We urge you to vote favorably on HB230.

The Clean Trucks Act would require Maryland's Department of the Environment to adopt on or before December 1, 2023 regulations establishing requirements for the sale of new zero emission medium- and heavy-duty vehicles, in effect adopting the Advanced Clean Truck Rule. Maryland's Advanced Clean Truck Rule would not require local businesses to purchase these zero emission vehicles (ZEVs). Rather, it would require that vehicle manufacturers sell an increasing annual percentage of new zero emission medium- and heavy-duty vehicles, including pickup, delivery, and semi-trucks as well as school buses between Model Years 2027 and 2035. **Over 100 models from more than 30 manufacturers are either currently on the market or will be before 2024. Over 70 major companies, including fleet operators, are urging adoption of the Advanced Clean Truck Rule.**

Although medium- and heavy-duty trucks and buses make up only nine percent of Maryland's 4.2 million registered vehicles, they contribute 39 percent of nitrogen oxide (NOx) emissions, 48 percent of fine particulate matter (PM2.5), and 21 percent of climate-changing carbon pollution from all on-road vehicles in the state.

The transportation sector is Maryland's number one generator of climate-damaging greenhouse gas emissions. The state's 2017 Greenhouse Gas Emissions Inventory[1] shows that gasoline and diesel powered on-road and off-road vehicles accounted for roughly 40 percent of state greenhouse gases; **the 2020 Greenhouse Gas Emissions Inventory shows emissions from both types of vehicles rising to 46 percent of state greenhouse gas emissions.[2]**

Tailpipe emissions from these vehicles are hazardous to human health and contribute to

[1] MD GHG EI Base Year and Projection Years (maryland.gov), Figure ES-1 and Section 1.3.3.
[2] Ibid, Figure ES-2.

cancers, heart disease, asthma, emphysema and other respiratory diseases. Nitrogen oxides and fine particulate matter can lead to the production of soot, smog and ozone. **More than 80% of Marylanders live in counties that do not meet federal clean air standards for ozone, due in significant part to tailpipe emissions.** Many black and brown communities in Maryland are particularly hard hit with health issues caused by tailpipe pollution due to the cumulative impact created by their proximity to major highways and roadways and to industry polluters such as incinerators, landfills, fossil fuel power plants, electric sub stations, and open coal transfer stations. **Data from a report[3] by the International Council on Clean Transportation shows that by adopting the California Advance Clean Truck standards, Maryland would significantly reduce nitrogen oxides and fine particulate matter and thus cases of respiratory illnesses.**

This bill would benefit local governments and businesses, making it easier for them to purchase zero emission buses and other medium- and heavy-duty vehicles. Without regulations adopting the Advance Clean Truck Rule, manufacturers will shift their supply and sales to states that have adopted ACT such as California, Massachusetts, New Jersey, New York, Oregon, Washington and Vermont.

In 2013, Maryland joined seven other states in signing a memorandum of understanding committing to have 300,000 zero-emission vehicles (including plug-ins) on the road by 2025, and 600,000 ZEVs on the road by 2030. Maryland has a goal to reduce state greenhouse gas emissions 60% by 2031 (compared to 2006 levels) and 100% by 2045. **HB230 would significantly increase the likelihood the state will meet its greenhouse emission reduction goals and improve the lives of its residents.**

We support this bill and recommend a **FAVORABLE** report in committee.

MoCo CAP Coalition:
350 Montgomery County (350 MoCo)
Ask the Climate Question (ACQ)
Chesapeake Climate Action Network (CCAN)
Elders Climate Action
Environmental Justice Ministry Cedar Lane Unitarian Universalist Church
Friends of Sligo Creek
Glen Echo Heights Mobilization
Green Sanctuary Committee of the Unitarian Universalist Church of Silver Spring
Montgomery County Faith Alliance for Climate Solutions (MCFACS)
One Montgomery Green
Safe Healthy Playing Fields

[3] International Council on Clean Transportation, "Benefits of adopting California's Advanced Clean Truck Program, Heavy-Duty Vehicle Omnibus Standards and a 100% sales requirement in Maryland (Sept. 2022), https://theicct.org/wp-content/uploads/2022/09/HDV-fact-sheet-MD-092122.pdf

Sugarloaf Citizens Association
Takoma Park Mobilization Environment Committee (TPMEC)
The Climate Mobilization, Montgomery County Chapter
Transit Alternatives to Mid-County Highway Extended (TAME Coalition)

HB 230 CATF Favorable.pdf
Uploaded by: Dru Schmidt-Perkins
Position: FAV

February 8, 2023

Maryland General Assembly,
House of Delegates,
Environment and Transportation Committee

Re: Clean Air Task Force's *Support* for the Clean Trucks Act of 2023, H.B. 230

Clean Air Task Force ("CATF") is pleased to provide testimony in support of Maryland H.B. 230, titled "Clean Trucks Act of 2023." CATF is a global nonprofit organization working to safeguard against the worst impacts of climate change by catalyzing the rapid development and deployment of low-carbon energy and other climate-protecting technologies.

Maryland has taken important steps to reduce climate pollution, improve air quality, and transition to a clean economy. Reducing transportation pollution is an essential next step in Maryland and the rest of the United States to avoid the worst impacts of climate change.

CATF strongly supports H.B. 230, which would put Maryland on a clear path to reducing pollution from medium- and heavy-duty trucks and buses. By passing this bill, Maryland would join an increasing number of states[1] that have adopted or are in the process of adopting the Advanced Clean Truck rule ("ACT").[2] This rule will curb climate change pollution, improve public health, and strengthen Maryland communities.

Transportation accounts for 35 percent of Maryland's annual greenhouse gas ("GHG") emission, totaling 85.05 million metric tons ("MMT") per year, according to the 2020 Maryland Greenhouse Gas Inventory.[3] Of that 35 percent, diesel vehicles -- many of which are medium- and heavy-duty vehicles, contribute 24 percent or 5.89 MMT per year. Globally, medium- and heavy-duty trucking produces around 2.25 billion metric tons[4] per year of carbon dioxide ("CO_2"), of which about 487 MMT[5] per year are emitted in the U.S. These 487 MMT of CO_2 represent 26 percent of total GHG emissions from the U.S. transportation sector.[6]

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[1] **Adopted**: California, Massachusetts, New Jersey, New York, Oregon, Vermont, Washington. **Considering**: Connecticut, Maryland, Maine, Colorado, Washington, D.C., Hawaii, North Carolina, Pennsylvania, Rhode Island, Virginia.
[2] Advanced Clean Trucks Regulation, Cal. Code Regs. tit. 13, §§ 1963-1963.5, 2012-2012.2 (2019).
[3] *Greenhouse Gas Inventory*, Maryland Department of the Environment, https://mde.maryland.gov/programs/Air/ClimateChange/Pages/GreenhouseGasInventory.aspx (last visited Feb. 6, 2023).
[4] *See CO2 emissions from trucks and buses, 2000-2021, and 2030 in the Net Zero Scenario*, Int'l Energy Agency ("IEA"), https://www.iea.org/data-and-statistics/charts/co2-emissions-from-trucks-and-buses-2000-2021-and-2030-in-the-net-zero-scenario (last visited Feb. 1, 2023) (sum of heavy, medium trucking and transit bus emissions for 2019).
[5] See, *Fast Facts on Transportation Greenhouse Gas Emissions*, U.S. Env't Prot. Agency ("EPA") (Jul. 14, 2022), https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions [hereinafter EPA, *Fast Facts*]; see also *Greenhouse Gas Inventory Data Explorer*, EPA, https://cfpub.epa.gov/ghgdata/inventoryexplorer/#allsectors/allsectors/allgas/econsect/current (last visited Feb. 1, 2023).
[6] EPA, *Fast Facts*, *supra* note 5.

Medium- and heavy-duty vehicles also emit high rates of other dangerous pollutants, such as nitrogen oxides and particulate matter.[7] According to CATF's Deaths by Dirty Diesel tool, diesel vehicle pollution (both on- and off-road) are projected to contribute to 186 deaths and approximately $2 billion in monetized health impacts in the state of Maryland this year.[8] Further, it is well-documented that these pollutants disproportionally harm people of color and low-income communities.[9] The U.S. Environmental Protection Agency ("EPA") found that communities living near "high-traffic roadways" are "more likely to be people of color and have lower incomes."[10]

By adopting the ACT,[11] Maryland will take meaningful steps toward addressing the health inequities stemming from diesel pollution. The ACT aims to accelerate the transition of Class 2b to Class 8 medium- and heavy-duty diesel trucks to zero emission vehicles ("ZEV") while providing flexibility to manufacturers to reach this goal. Specifically, the ACT defines a "zero-emission vehicle" as "an on-road vehicle with a drivetrain that produces zero exhaust emission of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions."[12] This definition allows manufacturers to comply with the rule by producing and selling several types of vehicles, including battery electric vehicles and hydrogen fuel-cell electric vehicles. In this way, the ACT creates flexibility that will result in both environmental and economic benefits. Adopting ACT also will give Maryland a competitive edge in the global market transition to zero-emission vans, buses, and trucks by ensuring that new vehicle technologies will be available to businesses across the state.

Importantly, new federal policies will provide historic levels of funding for clean energy and climate change solutions. States such as Maryland have access to billions of dollars in federal funding that can be used to implement the ACT. The Inflation Reduction Act ("IRA"), for example, offers billions of dollars in financial support through tax credits for manufacturing,[13]

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[7] American Lung Association ("ALA"), *Delivering Clean Air: Health Benefits of Zero-Emission Trucks and Electricity* 3 (2022), https://www.lung.org/getmedia/e1ff935b-a935-4f49-91e5-151f1e643124/zero-emission-truck-report.

[8] *See Deaths by Dirty Diesel*, CATF, https://www.catf.us/deathsbydiesel/ (last visited Feb. 1, 2023).

[9] *See* Emily Kent & Jonathan Lewis, CATF, *Diesel Pollution is a Deadly Problem in the United States* (Jan. 20, 2022), https://www.catf.us/2022/01/diesel-pollution-deadly-problem-united-states/ (noting that air pollution from diesel trucks and other diesel-fueled equipment "often occurs in industrial or urban hubs and causes health disparities that further inequitable harms on historically marginalized communities."); ALA, *New Report: Transition to Zero-Emission Trucks Could Save More Than 66,000 Lives* (Oct. 4, 2022), https://www.lung.org/media/press-releases/new-report-transition-to-zero-emission-trucks-cou ("Truck traffic produces harmful pollution, and approximately 45% of residents living in counties with major truck traffic are people of color.").

[10] EPA, Office of Transportation and Air Quality, EPA-420-F-22-008, *Transportation and Environmental Justice Regulatory Announcement* 2 (Mar., 2022), https://nepis.epa.gov/Exe/ZyPDF.cgi/P10144Y3.PDF?Dockey=P10144Y3.PDF.

[11] Advanced Clean Trucks Regulation, Cal. Code Regs. tit. 13, §§ 1963-1963.5, 2012-2012.2 (2019).

[12] *Id.* § 1963(c)(21).

[13] *See, e.g.*, 26 U.S.C. § 45X (advanced manufacturing production credit with direct pay available for states); *id.* § 48C (advanced energy project credit with direct pay available for states).

vehicle replacements,[14] charging and fueling infrastructure,[15] supply chain development,[16] worker training,[17] emissions monitoring,[18] and community benefits.[19] In particular, the IRA provides tax credits for clean fuel production,[20] credits to reduce the effective cost of commercial ZEVs such as trucks and buses,[21] credits for domestic manufacturing of battery components and critical minerals,[22] and credits for the development of qualified alternative fuel vehicle refueling property, including charging and refueling stations.[23] The IRA also appropriates $1 billion to EPA to create a program that awards grants and rebates for the costs of replacing existing vehicles with ZEVs, purchasing, installing, operating, and maintaining infrastructure needed for ZEVs, associated workforce development and training, and planning and technical activities needed to support the deployment of ZEVs.[24] These new federal policies, along with many others,[25] will provide important financial incentives to industry in support of Maryland's transition away from diesel-powered trucks.

Additionally, the Infrastructure Investment and Jobs Act provides $8 billion to the Department of Energy ("DOE") to fund regional hydrogen hubs across the country.[26] Although the DOE has yet to finalize the locations of these hubs, the Mid-Atlantic Hydrogen Hub coalition, which covers Maryland, Virginia, and the District of Columbia, has submitted a proposal for DOE funding and has received a notice of encouragement from the DOE to continue with its application.[27] Federal investment in clean fuel production will support a growing fleet of ZEVs and financially aid in the implementation of the ACT.

Given the urgency of climate change and the significant opportunity to improve public health, strengthen communities, boost Maryland's economic competitiveness, and leverage federal funding, now is the time for Maryland to adopt the ACT.

Therefore, Clean Air Task Force urges the Maryland House of Delegates to adopt H.B. 230.

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[14] Inflation Reduction Act of 2022 § 60101, 42 U.S.C. § 7432 (adding new Clean Air Act § 132 to provide grants for clean heavy-duty vehicles); 26 U.S.C. § 45W (clean vehicle credit with direct pay available for states and other government vehicles).
[15] *See, e.g.,* 26 U.S.C. § 30C (alternative fuel vehicle refueling property credit with direct pay available for states); *id.* § 45V (clean hydrogen credit with direct pay available for states).
[16] *See, e.g., id*. §§ 48C & 45X.
[17] *See* 42 U.S.C. § 7432.
[18] *See* Inflation Reduction Act of 2022 § 60105(c) (appropriating $3 million to "deploy, integrate, and operate air quality sensors in low-income and disadvantaged communities").
[19] *See, e.g.,* 42 U.S.C. § 7438 (Environmental and Climate Justice Block Grants).
[20] *See* 26 U.S.C. § 45V (tax credit for clean hydrogen production); *id*. § 45Z (tax credit for clean fuel production).
[21] *Id.* § 45W.
[22] *Id*. § 45X
[23] *Id*. § 30C.
[24] 42 U.S.C. § 7432.
[25] For a more comprehensive summary of federal government funding opportunities, see CATF's forthcoming resource, *IRA and IIJA Funding Programs that Support Advanced Clean Trucks Implementation*.
[26] *See* 42 U.S.C. § 16161a.
[27] David Iaconangelo, *DOE eyes winners for nation's first hydrogen hubs*, Politico (Jan. 3, 2023, 6:49 A.M.), https://subscriber.politicopro.com/article/eenews/2023/01/03/doe-eyes-winners-in-hydrogen-hub-competition-00075864.

Please reach out to CATF's Senior Manager of U.S. State Policy and Advocacy, Angela Seligman (email: aseligman@catf.us, cell: 314.922.5293) with any questions.

CATF is a global nonprofit organization working to safeguard against the worst impacts of climate change by catalyzing the rapid development and deployment of low-carbon energy and other climate-protecting technologies. With over 25 years of internationally recognized expertise on climate policy and a fierce commitment to exploring all potential solutions, CATF is a pragmatic, non-ideological advocacy group with the bold ideas needed to address climate change. CATF has offices in Boston, Washington D.C., and Brussels, with staff working remotely around the world.

HB230_SB224_CLEANTRUCKS_MDPIRG_ENVMD_FAV.pdf
Uploaded by: Emily Scarr
Position: FAV

HB230: Clean Trucks Act of 2023
Environment & Transportation
Feb. 8th, 2023
FAVORABLE

Maryland PIRG is a state based, small donor funded public interest advocacy organization with grassroots members across the state. We work to find common ground around common sense solutions that will help ensure a healthier, safer, more secure future

Environment Maryland is a citizen-based environmental advocacy organization. We work to protect clean air, clean water, and open space.

Throughout the state, Maryland children and families are suffering from the damaging effects of living with unhealthy air quality. Maryland PIRG Foundation and Environment Maryland Research and Policy Center released "Trouble in the Air" in 2021, which outlined elevated air pollution days throughout the state. The Baltimore area experienced 43 elevated air pollution days in 2020, and many metropolitan areas throughout Maryland faced similar levels of air pollution. Elevated air pollution increases the risk of premature death, asthma attacks, cancer and other adverse health impacts.

And in the American Lung Association's 2022 State of the State Report, six Maryland counties received an "F" for air quality. [See chart to view your county here]

The Clean Trucks Act of 2023 will direct the Department of the Environment to adopt new regulations for the sale of zero-emission medium and heavy duty trucks in the state by the end of 2023..

Diesel fumes from medium and heavy duty trucks on the road is a true health hazard.

Diesel particulate matter contributes to numerous health impacts including increased hospital admissions, particularly for heart disease, but also for respiratory illnesses, and even premature death.

Diesel trucks, like all fossil fuel vehicles, are also a source of global warming pollution.

Zero-emission trucks provide savings to fleets: many trucks are already cost competitive on a total cost of ownership basis; larger vehicles are expected to achieve parity by 2025, and heavy-duty long-haul vehicles are expected to achieve parity by 2030 (ZEV owners

Emily Scarr, Maryland PIRG Director emily@marylandpirg.org
Twitter: @emilyscarr @marylandpirg

are anticipated to save $30,000 over the lifetime and especially after model year 2035).[1] This is largely due to fuel cost savings from charging with less expensive fuel and anticipated lower maintenance costs.

The upfront price of vehicles is also expected to continue to decline significantly as battery prices decline; state action to push towards zero emissions trucks will only further that trend by increasing supply and improving economies of scale in a way that continues to depress prices. That being said, it is important to remember in the nearer term that looking only at these upfront expenses results in a myopic point of view - one that tells only a small part of the story and doesn't take into account public health impacts and related healthcare costs.

States are moving towards cleaner trucks, including California, Massachusetts, New York, New Jersey, Washington, and Oregon. This legislation would also help Maryland follow through on its commitment for 30% of all medium and heavy duty vehicles sales to be electric by 2030.

We respectfully request a favorable report.

[1] North American Council for Freight Efficiency, *Electric Trucks: Where They Make Sense* (May 2019) at 13-14, https://nacfe.org/emerging-technology/electric-trucks/; ICF, Comparison of Medium- and Heavy-Duty Technologies in California – Executive Summary (Dec. 2019) at 4, https://www.caletc.com/assets/files/ICF-Truck-Report_Final_December-2019.pdf.

HB230_MoCo_SUPPORT.pdf
Uploaded by: Garrett Fitzgerald
Position: FAV

Montgomery County
Office of Intergovernmental Relations

ROCKVILLE: 240-777-6550 **ANNAPOLIS: 240-777-8270**

HB 230 **DATE: February 6, 2023**

SPONSOR: Delegate Love

ASSIGNED TO: Environment and Transportation

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

POSITION: FAVORABLE

Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)

House Bill 230 would require the Maryland Department of the Environment (MDE) to adopt new regulations by December 1, 2023 establishing requirements for the sale of new zero-emission medium- and heavy-duty vehicles in the state. The bill instructs MDE to reference standards adopted by the State of California in 2020, as has already been done in New York, New Jersey, Massachusetts, Oregon, and Washington. Those standards would require all manufacturers that sell medium- and heavy-duty vehicles in the state to sell an increasing annual percentage of those as zero-emission vehicles.

The combustion of fossil fuels in medium- and heavy-duty vehicles results in significant greenhouse gas emissions and criteria air pollution, which is often concentrated in overburdened communities where it contributes to undesirable health outcomes. Technological innovation now allows manufacturers to offer zero-emission models of these vehicles. More than 70 models of zero-emission vans, trucks and buses are already commercially available from several manufacturers, and more are forthcoming.[1]

This bill aligns with a recent recommendation of the Maryland Commission on Climate Change.[2] It will reduce greenhouse gas emissions and criteria air pollution in Maryland, improving public health. The bill will also support the County's efforts to transition our own fleet to zero-emission vehicles by encouraging vehicle manufacturers to offer more options at potentially lower prices.

Montgomery County respectfully urges the committee to issue a favorable report on House Bill 230.

[1] California Air Resources Board, "Advanced Clean Trucks Fact Sheet," https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.
[2] Maryland Commission on Climate Change, "2022 Annual Report," Page 11, https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Pages/index.aspx.

House Bill 230 Zero Emmission Trucks - Feb 7 - Ho

Uploaded by: Henry Bogdan

Position: FAV

MARYLAND NONPROFITS
www.marylandnonprofits.org

1500 Union Avenue, Suite 2500, Baltimore, MD 21211
410.727.6367 800.273.6367 Fax 410.235.2190

February 25, 2022

Testimony on House Bill 230
Clean Trucks Act of 2023
House Environment & Transportation Committee

Position: Favorable

Maryland Nonprofits is a statewide association of more than 1500 nonprofit organizations and institutions. We strongly urge you to support House Bill 230 to join other states in adopting the Advanced Clean Truck Rule for Maryland.

Air quality, like other aspects of the environment, has a significant impact on the health of our communities. **Public infrastructure, and environmental hazards (including factors such as traffic congestion and truck-routing) often have disproportionate effects on low-income communities and communities of color.**

Trucks and other large vehicles account for 9% of vehicles on the road but **contribute 21% of carbon pollution** and **48% of particulate matter pollution** (PM2.5) emitted by the entire transportation sector in Maryland. People who are heavily exposed to PM2.5 and other toxic truck emissions like nitrogen oxides are at a greater risk for developing asthma and other lung diseases like chronic obstructive pulmonary disease and lung cancer.

To help meet its long-term climate, air quality, and public health goals, Maryland should pass legislation to adopt the Advanced Clean Truck (ACT) Rule. The rule requires that vehicle manufacturers sell an increasing percentage of new zero-emission trucks and school buses through 2035. By requiring the electrification of school buses and large pickup, delivery, drayage, and semi-trucks, the Advanced Clean Truck Rule is a critical tool in the effort to combat toxic air pollution that makes us sick and contributes to climate change.

The Clean Trucks Act of 2023 would require the Maryland Department of Environment to adopt the Advanced Clean Truck Rule by the end of 2023. The rule requires vehicle manufacturers to sell an increasing annual percentage of zero-emission trucks and school buses that varies by size beginning in Model Year 2027. The rule increases sales targets at a pace that is gradual and technologically feasible.

The Advanced Clean Truck rule has a one-time reporting requirement for all fleets. The collected data will help identify areas with high rates of freight traffic and consequently, diesel pollution. In 2022, the Maryland Commission on Climate Change included a recommendation in its annual report that Maryland adopt the Advanced Clean Truck Rule.

We urge you to give House Bill 230 a **favorable report**

TESTIMONY FOR HB0230.pdf
Uploaded by: Jared Schablein
Position: FAV

TESTIMONY FOR HB0230

Clean Trucks Act of 2023

Bill Sponsor: Delegate Love
Committee: Environment and Transportation
Organization Submitting: Lower Shore Progressive Caucus
Person Submitting: Jared Schablein, Chair
Position: FAVORABLE

I am submitting this testimony in favor of HB0230 on behalf of the Lower Shore Progressive Caucus. The Caucus is a political and activist organization on the Eastern Shore, unaffiliated with any political party, committed to empowering working people by building a Progressive movement on the Lower Eastern Shore.

By December 1, 2023, this critical piece of legislation would mandate the Maryland Department of the Environment to adopt the Advanced Clean Truck rule. Between Model Years 2026 (for states that approve in 2022) and 2035, vehicle manufacturers must sell a growing annual percentage of electric medium and heavy-duty vehicles, including pickup, delivery, and semi-trucks as well as school buses. These vehicles make up 10% of the total number of vehicles on the road yet are responsible for 30% of the carbon emissions, 45% of the poisonous nitrogen oxide emissions, and 57% of the particulate matter that is harmful to human health that is produced by the whole transportation sector in the US.

Vehicle electrification must happen as rapidly as practical, although there are specific conditions that need to be met in order for this to happen. When they are able sell gas-powered vehicles, manufacturers are hesitant to retool their plants and produce electrified ones.

Under Section 177 of the Clean Air Act, states other than California are not allowed to set their own emissions standards. However, states can choose to follow and adopt vehicle standards that California has enacted. Maryland first adopted California's clean car standards for personal vehicle electrification through legislative action in 2007. Maryland has the opportunity to enact similar standards again and clean up large dirty diesel vehicles that continue to harm our health and exacerbate climate change.

This legislation would help Maryland follow through on its commitment for 30% of all medium and heavy-duty vehicles sales to be electric by 2030 and could create high quality green jobs in the process. Maryland would also be included in the growing number of states adopting the Advanced Clean Truck Rule, including California, Massachusetts, New York, New Jersey, Washington, and Oregon.

We support this bill and recommend a **FAVORABLE** report in committee.

HB230_MDSierraClub_fav 9Feb2023.pdf
Uploaded by: Josh Tulkin
Position: FAV

P.O. Box 278
Riverdale, MD 20738

Committee: **Environment and Transportation**
Testimony on: **Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)**
Position: **Favorable**
Hearing Date: **February 8, 2023**

The Maryland Chapter of the Sierra Club strongly supports HB230 and considers it to be one of our high priority bills this session. HB230 would require the Maryland Department of the Environment to adopt the Advanced Clean Trucks (ACT) Rule by the end of this year. The rule would require vehicle manufacturers to sell an increasing annual percentage of zero-emission trucks and school buses in the state beginning in Model Year 2027 and concluding in 2035. The rule would increase the percentage of new zero-emission trucks and school buses required to be sold each year at a pace that would be gradual and technologically feasible.

Transportation is the largest source of climate-damaging greenhouse gas emissions and a leading source of toxic air pollution that is hazardous to human health. According to data from a report by the International Council on Clean Transportation, if Maryland adopts the ACT, the state would avoid more than 116,000 cases of respiratory illnesses like asthma cumulatively through 2050. Residential neighborhoods located near major roads and highways face disproportionate burdens from traffic and transportation pollution. These neighborhoods are far more often communities of color due to decades of residential segregation, and bear a burden of higher rates of asthma and other health conditions.

Section 177 of the Clean Air Act allows states to adopt vehicle emissions standards that are identical to those adopted by the state of California. In 2020, in the absence of federal regulations, California set the first-in-the-nation standards for the sale of zero-emission medium and heavy-duty trucks through adoption of the ACT Rule. Since then, New York, New Jersey, Massachusetts, Oregon, Vermont, and Washington have adopted the same ACT Rule, and a number of other states are considering doing so, too. In 2023, the Maryland Commission on Climate Change included a recommendation in its annual report that the state adopt the ACT Rule.

Companies across the nation are increasingly demanding electric trucks and vans to help them meet their climate and pollution goals, and to save on the costs of fuel and maintenance. More than 70 major corporations, including IKEA and Nestle that have large truck fleets, signed a letter urging state governors to accelerate the growth of electric trucks by adopting the ACT Rule. Electric trucks are increasingly available. There are over 100 models from more than 30 manufacturers that are currently on the market or will be before 2024.

By requiring the electrification of school buses and large pickup trucks, drayage, delivery, and semi-trailer trucks sold in Maryland, the ACT Rule would be a crucial step in the effort to combat climate change and reduce the toxic air pollution that makes us sick. We urge a favorable report on this bill.

Lindsey Mendelson
Transportation Representative
Lindsey.mendelson@MDSierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

HB0230 - FAV - Department of the Environment - Zer

Uploaded by: Landon Fahrig

Position: FAV

Maryland Energy Administration

TO: Members, House Environment & Transportation Committee
FROM: Paul Pinsky - Director, MEA
SUBJECT: HB 230 - Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)
DATE: February 8, 2023

MEA Position: FAVORABLE

House Bill 230 can help spur the adoption of zero-emission medium- and heavy duty (MHD) vehicles in the State, help Maryland to reach its goals to reduce GHG emissions to 60% by 2031, and support a national shift toward transportation sector decarbonization.

MHD vehicles are a disproportionately large contributor to greenhouse gas emissions, fine particulate matter (PM2.5), and toxic diesel particulate matter. The Advanced Clean Truck Regulation is part of a national push to address MHD emissions, beginning in California and now adopted by seven (7) states in total (including regional neighbor New Jersey) with several other jurisdictions committed to join via Memoranda of Understanding. The purpose of the bill and regulations is to accelerate a transition of zero-emission Class 2b-8 MHD vehicles.

Manufacturers who sell Class 2b-8 MHD will be required to sell zero-emission vehicles as an increasing percentage of their annual sales through 2035. By 2035, zero-emission MHD requirements will be equal or greater than 55% of Class 2b-3 truck sales, 75% for Classes 4-8 straight truck sales, and 40% of truck tractor sales. By doing so, it is estimated that Maryland can save 46.45 million metric tons of CO2e by 2050 when compared to "business as usual".[1] This is equivalent to removing the annual emissions produced by more than 10,000,000 passenger vehicles.

This bill doesn't single Maryland out. Rather, by joining with other Advanced Clean Truck Regulation states Maryland will be contributing to a critical mass of political support and market share, and we will hopefully inspire others to join as well. It is this aggregate influence that will reshape the American MHD vehicle market to be world-leading in terms of its emissions standards

For the forgoing reasons, MEA is asking the committee for an **FAVORABLE** report.

[1] ICCT Fact Sheet, theicct.org/wp-content/uploads/2022/09/HDV-fact-sheet-MD-092122.pdf

HB230_Clean Trucks_Environment & Transportation_CJ
Uploaded by: Laurie McGilvray
Position: FAV

Committee: **Environment & Transportation**
Testimony on: **HB0230 - Dept. of Environment-Zero-Emission Medium and Heavy Duty Vehicles-Regulation (Clean Trucks Act of 2023)**
Organization: **Maryland Legislative Coalition Climate Justice Wing**
Submitting: **Laurie McGilvray Co-Chair**
Position: **Favorable**
Hearing Date: **February 8, 2023**

Dear Mr. Chairman and Committee Members:

Thank you for allowing our testimony today. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of over 50 grassroots and professional organizations, urges you to vote favorably on HB230.

The Clean Trucks Act would require Maryland's Department of the Environment to issue regulations on or before December 1, 2023, which would establish requirements for the sale of new zero emissions medium- and heavy-duty vehicles (in essence adopting the Advance Clean Truck Rule). This rule would require vehicle manufacturers to sell an increasing annual percentage of new zero emission medium- and heavy-duty vehicles including pickup, delivery, and semi-trucks as well as school buses between Model Years 2026 and 2035. It would not require local businesses to purchase zero emissions medium-and heavy-duty vehicles.

Transportation is Maryland's number one source of greenhouse gas emissions. The State's 2020 Greenhouse Gas Emissions Inventory shows that gasoline and diesel powered on-road and offroad vehicles account for nearly 46 percent of the State's greenhouse gas emissions, which represent increases for both types of vehicles since 2019. Although medium- and heavy-duty trucks and buses make up only nine percent of Maryland's 4.2 million registered vehicles, they contribute 39 percent of nitrogen oxide emissions, 48 percent of fine particulate matter, and 21 percent of emissions from all on-road vehicles in the state.

Tailpipe emissions from these vehicles are hazardous to human health and contribute to cancers, heart disease, asthma, emphysema, and other respiratory diseases. More than 80% of Marylanders live in counties that do not meet federal clean air standards for ozone, due in significant part to tailpipe emissions. The health of residents in many black and brown communities is more severely impacted by these emissions, because of their proximity to major highways, plus the cumulative impacts of other environmental assaults (e.g., industrial facilities,

landfills, coal and gas-fired power plants, and coal transfer stations). By adopting the Advance Clean Truck standards, Maryland will significantly reduce nitrogen oxides and fine particulate matter, and reduce the risk of respiratory illnesses like asthma.

Furthermore, without regulations adopting the Advance Clean Truck Rule, manufacturers will shift their supply and sales to states that have adopted it, such as California, Massachusetts, New Jersey, New York, Oregon, and Washington. HB230 will benefit local governments and businesses by making it easier for them to purchase zero emissions buses and other medium- and heavy-duty vehicles.

Maryland has a goal to reduce greenhouse gas emissions by 60% by 2031 (compared to 2006 levels) and 100% by 2045. HB230 will significantly increase the likelihood the state will meet these ambitious greenhouse emission reduction goals, not to mention improving the lives its residents. Therefore, we support HB230 and recommend a **FAVORABLE** report.

hb230- ZEV, state- E&T 2-8-2023.pdf
Uploaded by: Lee Hudson
Position: FAV

Delaware-Maryland Synod
Evangelical Lutheran Church in America
God's work. Our hands.

Testimony Prepared for the
Environment and Transportation Committee
on
House Bill 230
February 8, 2023
Position: **Favorable**

Mr. Chairman and members of the Committee, thank you for this opportunity to support a cleaner energy future via State purchasing. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, Evangelical Lutheran Church in America. We are a faith community with three judicatories across our State.

My community advocates for reductions of current and future greenhouse gas emissions through public policies that influence energy demand and consumption.

Lower emissions from vehicles are feasible with current technology and product. What is needed is expansion of demand to scale the product.

Commercial demand for zero emission vehicles is presently strong, suggesting the public is making a deliberate decision. Supporting market growth for zero emissions will hasten the result necessary for the desired effect, GGR. The State of Maryland can do its part by recruiting its purchasing power to increase ZEVs in its market.

House Bill 230 would adopt the relevant standards in California's ACT policy to increase ZEVs in the State's vehicle fleets. We support this policy instrument and its goal and ask your favorable report.

Lee Hudson

5699 Meridale Rd. Baltimore, MD 21228 410-230-2860 800-869-5492 fax 410-230-2871

MD HB 230 EDF Testimony.pdf
Uploaded by: Neda Deylami
Position: FAV

February 8, 2023

Testimony on HB 230 – Clean Trucks Act of 2023
Environment & Transportation Committee
Position: Favorable
Environmental Defense Fund supports HB 230

The proposed legislation would require the Maryland Department of Environment to adopt the Advanced Clean Trucks (ACT) rule, joining 7 other states that have adopted, recognizing the substantial benefits the ACT would provide. The rule requires vehicle manufacturers to sell an increasing percentage of zero-emission medium- and heavy-duty vehicles through 2035 and must be adopted now for it to take effect on Model Year 2027 vehicles.

Adopting the ACT will result in significant health benefits for Marylanders, who are facing emissions from transportation in a quantity only second to New York State. A large share of that comes from the diesel trucks and buses that drive on the state's roads – nearly 20% of transportation greenhouse emissions in the state come from diesel. The pollution that causes climate change and harms health is not evenly felt – Baltimore City and Prince George's County, home to more than 25% of the state's population, face exposure from fine particulate matter that is 37 and 23 percent higher, respectively, than the state average. In Baltimore City, average exposure is almost twice the nation's average and not too far below Los Angeles County. The most polluted census tracts, those living near freight corridors, ports, and depots, have a higher concentration of low-income and residents of color – almost 15 percent of people living in the highest burden areas are Latino, compared with a state Latino population of just 9 percent. The ACT's one-time fleet reporting requirement would help further pinpoint how fleets are contributing to these hot spots of high pollution exposure.

The message is clear. The ACT will help electrify a sector that is disproportionately responsible for pollution that warms the climate and harms the health of Maryland's residents. It will also go a long way in helping Maryland achieve Governor Moore's target of reducing greenhouse gases 60% by 2030 and is a core means of achieving a transition to 100% zero-emission truck and bus sales, the overarching goal of the medium-and heavy-duty memorandum of understanding signed by former Governor Hogan in 2020.

The ACT will provide much needed policy certainty to market participants that may be hesitant to commit to zero-emission vehicles without a clear pathway to make the transition. Fleets such as FedEx and Walmart have expressed a desire to adopt zero-emission vehicles but need to know there will be ample vehicles to purchase. Increasing supply to meet demand will help the market achieve economies of scale, which will bring down upfront costs and continue to lower the total cost of ownership. The ACT is designed to be flexible and gradual, giving manufacturers room to take advantage of technology and cost improvements, transfer credits between manufacturers and vehicle classes, and adjust to possible fluctuations in sales from year to year. By adopting the ACT, alongside other complementary policies such as the Heavy-Duty Omnibus rule, equitable infrastructure deployment and effective rate design, the state can reduce energy consumption and emissions from the transportation sector, meet federal ambient air quality standards, and, with the right mechanisms in place, achieve renewable energy goals.

Maryland is on the right path to cleaning our transportation sector, and the ACT is a powerful tool to continue the state's commitment and complement other programs and policies. EDF urges a favorable report for HB 230.

HB-230_IndivisibleHoCoMD_FAV_PeterAlexander.pdf
Uploaded by: Peter Alexander
Position: FAV

HB-230 Department of the Environment – Zero–Emission Medium and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Testimony before

House Environment and Transportation Committee

February 08, 2023

Position: Favorable

Mister Chair, Mr. Vice Chair, and members of the Committee, my name is Peter Alexander and I represent the 750+ members of Indivisible Howard County. I am writing in support of HB-230, The Clean Trucks Act of 2023. We are grateful for the leadership of Delegate Love and several colleagues for sponsoring this bill which was introduced last year as HB-829.

Transportation is Maryland's number one generator of greenhouse gas emissions which are causing global climate change. Trucks account for 10% of vehicles on the road but contribute 30% of carbon emissions and 57% of particulate matter (PM2.5) emitted by the entire transportation sector in the United States. Tailpipe emissions contribute to ozone and particulate (PM2.5) pollution resulting in failure to meet federal clean air standards for more than 80% of Maryland residents.

Fossil fuel-powered trucks are significant sources of pollutants other than greenhouse gases. Diesel exhaust contains more than 40 toxic air contaminants that in some cases can lead to decreased lung function and can cause and/or worsen diseases such as asthma and cancer.

The Clean Trucks Act of 2023 would require the Maryland Department of Environment to adopt the Advanced Clean Truck Rule by the end of 2023. This rule requires all manufacturers that sell trucks in the state to sell an increasing annual percentage of zero-emission trucks, delivery vans, and school buses beginning in Model Year 2027. The rule increases sales targets at a pace that is gradual and technologically feasible.

If Maryland enacts the Clean Truck Act, the state would avoid 7.2 million metric tons of cumulative carbon pollution between now and 2050, the equivalent of emissions created from nearly 8 billion pounds of coal being burned. Over 70 major companies have signed a letter urging governors across the country to accelerate the growth of clean trucks by adopting the Advanced Clean Truck Rule.

Massachusetts, New York, New Jersey, Oregon and Washington joined California in 2021 by adopting the Advanced Clean Truck Rule, and more than a dozen other states have signed a joint memorandum of understanding committing to truck and bus electrification by 2050.

We respectfully urge a favorable committee report.

Peter Alexander, PhD
Woodbine, MD

20230206-HB230-Clean Trucks Act of 2023.pdf
Uploaded by: Ramon Palencia-Calvo
Position: FAV

MARYLAND LEAGUE OF CONSERVATION VOTERS

February 6, 2023

SUPPORT: SB224: Clean Trucks Act of 2023

Mr. Chairman and Members of the Committee:

Maryland LCV strongly supports SB224: Clean Trucks Act of 2023, and we thank Senator Augustine for his leadership on this issue.

In order to confront the growing threat of climate change, and meet the greenhouse gas (GHG) emission reduction goals codified in the Climate Solutions Now Act, Maryland must continue to take bold steps to address the pollution coming from the transportation sector, which is the single largest contributor to our GHG emissions. This bill would require all manufacturers that sell medium and heavy-duty trucks and school buses in Maryland to sell an increasing annual percentage of zero-emission trucks and school buses beginning in Model Year 2027 and concluding in 2035.

Moving vehicles away from fossil fuel-reliant technologies and moving to zero-emission electric vehicles (which can be charged with clean, renewable energy) is critical to this effort. Nationwide, trucks account for 10% of vehicles on the road, but contribute 30% of GHG emissions and 57% of particulate matter (PM2.5) emitted. People who are heavily exposed to PM2.5 and other toxic truck emissions like nitrogen oxides are at greater risk for developing asthma and many lung diseases like chronic obstructive pulmonary disease and lung cancer. Low income communities and communities of color disproportionately suffer the impacts of this diesel pollution.

Maryland LCV is especially invested in the inclusion of electric school buses in this legislation.

Every day over 650,000 children in Maryland ride to school on one of the State's approximately 7,200 diesel school buses. Every year, school buses in Maryland travel more that 128 million miles. Studies have shown that diesel pollutants concentrate inside a bus cabin, increasing children's exposure. A child riding inside of a diesel school bus may be exposed to as much as 15 times the level of toxic diesel

exhaust as someone riding in a car. Diesel emissions are filled with carcinogens, particulate matter and soot that increases lifetime risk of cancer, incidents of asthma and heart disease. These effects are particularly dangerous for children because their lungs, heart, and other organs are still developing.

Children riding in zero-emission buses have reduced exposure to air pollution, less pulmonary inflammation, more rapid lung growth over time and lower absenteeism compared to children riding in diesel buses, particularly those with asthma. In Maryland, approximately one in ten children suffer from asthma, and this rate is higher among minority groups. Asthma is a leading chronic illness among children in the United States, and it is also one of the leading causes of school absenteeism. In Maryland, 19.2 percent of parents reported that their child missed 1-2 days of school because of asthma and 9.7 percent said their child missed over seven days due to asthma.

Here in Maryland, several school districts already have electric school buses in their fleets, and this number is growing. Recent innovations, such as vehicle-to-grid (V2G) technology, coupled with the lower costs of operating and maintaining electric buses, have made them financially attractive for schools.

The Clean Trucks Act of 2023 will bring cleaner air to impacted communities while bringing zero-emission trucks and buses to scale in Maryland.

Maryland LCV strongly urges a favorable report on SB224.

Erdman_HB_0230 2023.pdf
Uploaded by: Robert Erdman
Position: FAV

HB 0230 Department of the Environment – Zero–Emission Medium– and Heavy–Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Position: Favorable

February 6, 2023

The Honorable Kumar Barve, Chair
Room 251, House Office Building
Annapolis, MD 21401

Honorable Chair Barve and Members of the House Environment and Transportation Committee:

My name is Robert Erdman. I am writing to you **in support** of House Bill 0230 - Clean Trucks Act of 2023.

My wife and I drive a 2013 Tesla Model S and a 2013 Chevy Volt, for almost 10 years now. It's time to start moving trucks to electrified transportation as well!

I reviewed some of the testimony from last year and heard some concern about the lack of charging equipment for EV Trucks. I'm confident that the chargers will be built out in a timely manner. When we got the Tesla model S in early 2013 there were only two Superchargers on the East Coast. By 2015 there were enough to easily make a trip from Maryland to Florida with my wife and two kids. Coverage will grow for EV Trucks as well as the market matures.

Not only do fossil fuel burning trucks pollute the local environment and add to global climate change, but they also use fuel sourced outside of Maryland.

I read in a paper from 2021 that every day, Maryland drivers spend over $18 million on motor vehicle fuels. That's over $6.6 billion a year! Since Maryland has no crude oil industry, at least 80% of the cost of every gallon immediately leaves the state economy. That's over $14.5 million that leaves the state every day. I don't know what percent of that is due to trucks, but I can imagine that it's a large amount of funds leaving the state every day. When trucks run on clean energy, that fuel can be sourced in Maryland supporting more local jobs and wealth. See https://evadc.wildapricot.org/EVInfo for more information.

Each fossil fuel burning truck replaced by an electric truck in Maryland provides economic and health benefits to all the citizens of Maryland. The benefits that accrue just to Maryland are worth the increase in EV sales due to the EVSE Rebate Program.

I respectfully ask for a favorable report.

Sincerely,

Robert Erdman
Potomac, MD 20854

HB 230_Maryland Catholics for Our Common Home_FAV.
Uploaded by: Robert Simon
Position: FAV

Hearing before the House Environment and Transportation Committee
Maryland General Assembly
February 8, 2023

Statement of Support (FAVORABLE)
of Maryland Catholics for Our Common Home on
HB 230, Clean Trucks Act of 2023

Maryland Catholics for Our Common Home (MCCH) is a lay-led organization of Catholics from parishes in the three Catholic dioceses in Maryland: the Archdiocese of Baltimore, the Archdiocese of Washington, and the Diocese of Wilmington. It engages in education about, and advocacy based on, the teachings of the Catholic Church relating to care for creation. MCCH is a voice for the understanding of Catholic social teaching held by a wide array of Maryland Catholics, but should be distinguished from the Maryland Catholic Conference, which represents the public policy interests of the bishops who lead these three dioceses.

MCCH would like to express its strong support for passage of House Bill 230, the Clean Trucks Act of 2023. As Catholics, we see care for God's creation and care for vulnerable groups in society as an integral part of our faith, as taught by recent Popes, including the forceful statements of Pope Francis. In his 2015 encyclical, entitled *Laudato Si': On Care for Our Common Home*,[1] Pope Francis specifically mentions that "Exposure to atmospheric pollutants produces a broad spectrum of health hazards, especially for the poor, and causes millions of premature deaths," and identifies transport as one of the sources of this pollution (no. 20). Studies of the role of trucks (including both medium-duty vehicles [MDVs] and heavy-duty vehicles [HDVs]) in air pollution bear this out in two important ways. First, they show that while MDVs and HDVs are about 10 percent of the vehicles on the road, they disproportionately contribute to emissions: about 29 percent of transportation GHG emissions, 45 percent of on-road NO_x emissions, and 57 percent of direct $PM_{2.5}$ (particulate matter ≤ 2.5 microns in diameter) emissions.[2] Second, because residential neighborhoods located near major highways and truck traffic are often poorer communities and communities of color, their residents bear a greater burden of these emissions and their health effects. We believe that addressing air pollution from MDVs and LDVs is responsive to Pope Francis's call to "integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor" (no. 49).

House Bill 230 will require that the State of Maryland adopt regulations establishing requirements for the sale of new zero–emission MDVs and HDVs in the State by December 1, 2023, based on California's standards for these vehicles. These regulations will address a key source of air pollution with disproportionate negative impacts on overburdened and vulnerable populations in our society.

Thank you for your consideration of our views and our respectful request for a **favorable** report on House Bill 230.

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[1] The English text of the encyclical, to which the paragraph numbers in the following parentheses refer, can be found at: https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

[2] K. L. Fleming, et al., "Electrification of Medium- and Heavy-Duty Ground Transportation: Status Report," *Curr Sustainable Renewable Energy Rep* **8**, 180–188 (2021). https://doi.org/10.1007/s40518-021-00187-3

Love Testimony_HB0230 Clean Trucks 2023 - Wttn.pdf
Uploaded by: Sara Love
Position: FAV

SARA N. LOVE
Legislative District 16
Montgomery County

Environment and Transportation Committee

The Maryland House of Delegates
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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

February 8, 2023

Sponsor Testimony for HB 230 – Department of the Environment – Zero–Emission Medium and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Chair Barve, Vice Chair Stein, Members of the Environment and Transportation Committee:

We in Maryland have set ambitious goals to combat the drastic consequences of pollution. The current Greenhouse Gas Emissions Reduction Act Plan aims to reduce Greenhouse Gas (GHG) emissions by 50% no later than 2030 and includes decreasing discharges from transportation as a key element. With trucks contributing the most significant portion of GHG emissions from transportation, we must take action in this area to help make our bold environmental goals a reality. HB 230 does this by requiring the establishment of regulations regarding the sale of new zero-emission medium and heavy-duty vehicles in our state.

The Context
Nationally, trucks and buses - usually fueled by diesel - account for 4% of vehicles on the road, but are responsible for nearly 25% of greenhouse gas emissions from transportation.[1] Truck emissions are the fastest growing source of greenhouse gas emissions.[2] Hazards from these emissions include soot or particulate matter (PM), oxides of nitrogen (NOx), hydrocarbons (HC), carbon monoxide (CO), and other air pollutants (HAPs) and air toxics.[3] They contribute significantly to serious human health and environmental effects.

Health studies show that exposure can affect the respiratory system, worsening asthma, allergies, bronchitis, and lung function, as well as increase the risk of heart problems, premature death, and lung cancer. According to EPA data, for the state of Maryland alone in 2023 these emissions will cause 186 deaths, 73 heart attacks, 5,814 respiratory illnesses, and 218 cases of increased risks for cancer, resulting in $2,061,170,446 in monetized health damages per year.[4]

From an environmental perspective, these emissions contribute to the production of ground-level ozone which damages crops, trees, and other vegetation. They also produce acid rain, which affects soil, lakes and streams, and enters the human food chain via water, produce, meat, and

[1] https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/
[2] https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/
[3] https://www.epa.gov/diesel-fuel-standards/about-diesel-fuels
[4] https://www.catf.us/deathsbydiesel/

fish. And, they contribute to climate change that impacts air and water quality, weather patterns, sea levels, ecosystems, and agriculture.[5]

Finally, in terms of social considerations, these emissions often occur in industrial or urban areas, contributing to health disparities and inequalities in frequently marginalized communities. Reducing emissions from medium and large-size vehicles through the sales of equal-size electric vehicles will improve air quality, protect people, improve the environment, and combat the effects of climate change for all.

In 2022, the Maryland Commission on Climate Change's annual report contained a recommendation that Maryland should adopt the Advanced Clean Truck Rule to help meet its climate targets.[6]

In 2020, then Governor Larry Hogan, along with the governors of 14 other states and the mayor of Washington, D.C., signed an agreement to collaborate on increasing the number of electric medium- and heavy-duty vehicles — pursuing a goal of all sales of these vehicles being zero-emission models by 2050.[7]

What the Bill Will Do

HB 230 will mandate that the Department of the Environment (MDE) adopt regulations on or before December 1, 2023 establishing requirements for the sale of new zero-emission medium and heavy-duty vehicles in the State. This Bill will encourage manufacturers and purchasers of medium and heavy-duty vehicles – including trucks and buses – to transition faster to zero-emission medium and heavy-duty transport vehicles.

HB 230 is modeled after 2020 legislation passed in California to help the state meet its air quality and climate targets. California's Advanced Clean Truck Regulation is part of their holistic approach to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles. Beginning in 2024, the regulations require each truck manufacturer selling medium-and heavy-duty vehicles in the state to increase over time the number of electric versions of these vehicles sold.[8]These regulations, the first in the world aimed at boosting sales of zero- emission trucks to regulate pollution from motor vehicles, have prompted many other states including Massachusetts, New Jersey, New York, Washington, and Oregon to adopt similar legislation.[9]

Despite the many benefits of moving in California's direction, I fully acknowledge there are questions regarding the infrastructure capacity. That is why the timeline is important. The timeline in HB 230 is only the regulation adoption date. After the rule is adopted, manufacturers will likely have two years to prepare before it goes into effect. The annual new sales

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[5] https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera#:~:text=Environment%20%2D%20Emissions%20from%20diesel%20engines,%2C%20produce%2C%20meat%20and%20fish

[6] https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Documents/2022%20Annual%20Report%20-%20Final%20(4).pdf

[7] https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/

[8] https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet

[9] https://www.scientificamerican.com/article/california-passes-historic-clean-truck-rule/

requirements start low and ramp up gradually while new types of electric trucks and buses continue to enter the market. This also gives Maryland time to build the necessary charging infrastructure.

In sum, the benefits of moving toward requirements for the sale of new zero-emission medium and heavy-duty vehicles in the State, far outweigh any costs.

For all the foregoing reasons, I urge the Committee to adopt a favorable report of HB 230.

Sincerely,
Delegate Sara Love

Earthjustice HB 230 Support Letter ACT legislation
Uploaded by: Susan Miller
Position: FAV

EARTHJUSTICE

February 6, 2023

Chair Kumar P. Barve
Members of the House Environment and Transportation Committee

Re: Earthjustice **support** of HB 230:
Department of the Environment – Zero-Emission Medium – and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Earthjustice[1] strongly supports the passage of HB 230. HB 230 requires the Maryland Department of the Environment (MDE) to adopt regulations establishing requirements for the sale of new zero-emission (ZEV) medium- and heavy-duty vehicles in the State by December 1, 2023.

To achieve Maryland's Greenhouse Gas ("GHG") emissions reduction goals, Maryland must reduce and ultimately eliminate the pollution caused by the transportation sector. HB 230 is a vital step in achieving the commitment Maryland made when then Governor Hogan signed the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding ("MOU") on July 13, 2020. Almost two years have passed since Maryland announced its commitment to adopt the California Advanced Clean Truck rules. Further delay will only continue the public health and climate harms caused by Maryland's reliance on non-electric vehicles.

BACKGROUND

On July 14, 2020, Maryland took another significant step forward in its effort to address the climate crisis and the health impacts of air pollution as it joined fourteen other states and the District of Columbia in signing a MOU to work collaboratively to advance and accelerate the market for electric medium- and heavy-duty vehicles, including large pickup trucks and vans, delivery trucks, box trucks, school and transit buses, and long-haul delivery trucks (big-rigs). The goal is to ensure that 100 percent of all new medium- and heavy-duty vehicle sales be zero emission vehicles by 2050 with an interim target of 30 percent zero emission vehicle sales by 2030. Massachusetts, New York, New Jersey, Oregon, Vermont, and Washington have already joined California in adopting these standards.

[1] Earthjustice is a non-profit public interest environmental law organization that represents other non-profits free of charge. Earthjustice uses the power of law and the strength of partnerships to advance clean energy, combat climate change, protect people's health and preserve magnificent places and wildlife.

ADOPTION OF THE CLEAN TRUCK RULE IS NECESSARY TO PROTECT PUBLIC HEALTH AND ACHIEVE MARYLAND'S CLIMATE OBJECTIVES

Maryland adopted very challenging, aggressive mandates to reduce Greenhouse Gas emissions to protect public health and to meet state climate change goals. The Climate Solutions Now Act ("CSNA") calls for a reduction of emissions of 60% by 2031 (from 2006 levels) and requires the state to reach net-zero by 2045. Meeting these goals requires a bold transformation in all sectors including transportation.

Transportation is now the largest source of GHG emissions in Maryland, and where reductions are needed most in the future. Transitioning to Medium - and Heavy -Duty ZEVs will be a key component of achieving additional reductions. In the Northeast corridor, 42% of all GHG emissions come from transportation. Similarly, 54% of all Nox emissions in the Northeast corridor also come from transportation.

Adoption of the Advanced Clean Truck Rule will go a long way toward slashing these harmful emissions. The transportation sector is the nation's largest source of greenhouse gas emissions and also contributes to unhealthy levels of smog. Accelerating the electrification of trucks and buses is an essential step to achieve the deep emission reductions needed to avoid the worst consequences of climate change and protect the health of millions of Marylanders.

Maryland needs zero-emission technology in the transportation sector not only to achieve its climate objectives but also to protect the health of Maryland residents. Mobile sources and the fossil fuels that power them are the largest contributors to Nox (which is the greatest contributor to ozone), greenhouse gas emissions, fine particulate matter (PM2.5), and toxic diesel particulate matter. Trucks and other large vehicles account for 9% of vehicles on the road but contribute 21% of carbon pollution and 48% of particulate matter pollution (PM2.5) emitted by the entire transportation sector in Maryland. While we have known the brutal health impact of diesel use for decades, recent research shows it's far worse than previously thought. Updated evidence of air pollution toxicity demonstrates its impacts are roughly double what was previously assumed.[2] Even low levels of diesel pollution damage virtually every system in the human body – lungs, hearts, brains, skin, and nervous system.

Truck and bus electrification also promises to deliver wide-spread benefits, to communities with heavy truck traffic that are burdened with higher levels of air pollution. Diesel trucks are one – if not the – starkest forms of environmental racism. A recent study determined that they are the largest source of air pollution disparity in the United States.[3] A new wave of freight infrastructure – warehouses and distribution centers – is spreading across the country,

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[2] David Roberts, *Air pollution is much worse than we thought*, Vox (Aug. 12, 2020), https://www.vox.com/energy-and-environment/2020/8/12/21361498/climate-change-air-pollution-us-india-china-deaths.

[3] Mary Angelique G. Demetillo et al., *Space-Based Observational Constraints on NO_2 Air Pollution Inequality From Diesel Traffic in Major US Cities*, Geophysical Research Letters (Aug. 25, 2021), https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021GL094333.

unsurprisingly concentrating in low-income communities of color. Parts of the Chesapeake Bay and surrounding areas of Baltimore have become epicenters of the warehouse boom.[4] Medium- and heavy-duty trucks are a major source of harmful smog-forming pollution, particulate matter, and air toxics. These emissions disproportionately impact low-income communities and communities of color often located near major trucking corridors, ports, and distribution hubs.

By adopting these rules, Maryland will reduce emissions of greenhouse gases, carbon dioxide, nitrogen oxides, fine particulate matter, and other pollutants. The rule also has significant public health impacts—reducing cases of acute bronchitis, exacerbated asthma, and other respiratory conditions.

Maryland has experienced firsthand the severe cost in people and capital from some combination of climate-induced tornados, hurricanes, flooding, or elevated temperatures that worsen air quality and stifle economic activity. Tackling climate change means removing diesel and gasoline from transportation.

AVAILABILITY AND COST OF ELECTRIC MODELS

HB 230 comes at an important transition point for the industry as investment in zero emission vehicle technology for the medium- and heavy-duty sector continues to ramp up. Today, over one hundred electric truck and bus models are on the market, and manufacturers are expected to continually make many more new electric models commercially available over the next decade. Sixty-five percent of medium-duty and half of heavy-duty trucks are electrifiable today.[5]

Every credible analysis has found that zero emission trucks save businesses and drivers money – even faster than electric cars, because of their lower fuel and maintenance costs. Even without incentives, the U.S. Department of Energy found that they would be cheaper to operate in every category by 2035, and for many categories much sooner.[6] Researchers at Lawrence Berkeley National Laboratory found that by 2035 Class 8 tractor will cost less than half of what it costs for the diesel equivalent.[7] Now, with the IRA adding a 30% tax credit for commercial EVs (and their chargers), analysts find that ZE trucks will actually be cheaper to purchase

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[4] Ad Crable & Jeremy Cox, *Mega-Warehouses Take Toll on Environment, Localities*, Bay Journal (Jul. 19, 2021), https://www.bayjournal.com/news/growth_conservation/mega-warehouses-take-toll-on-environment-localities/article_2cf71ea8-e55b-11eb-aacc-bfa8835d9767.html.

[5] Jessie Lund et al., *Charting the Course for Early Truck Electrification*, RMI (2022), https://rmi.org/insight/electrify-trucking/.

[6] Catherine Ledna et al., *Decarbonizing Medium- & Heavy-Duty On-Road Vehicles: Zero-Emission Vehicles Cost Analysis*, NREL (Mar. 2022), https://www.nrel.gov/docs/fy22osti/82081.pdf.

[7] Goldman School of Public Policy UC Berkeley, *Plummeting Costs and Dramatic Improvements in batteries Can Accelerate Our Clean Transportation* (June 2021), http://www.2035report.com/transportation/wp-content/uploads/2020/05/GridLab_2035-Transportation-Appendix.pdf?hsCtaTracking=c4d392a4-96ff-474c-86c3-bfa335c67aa2%7Ce2107ae8-40d7-44ff-8b5b-72016d87fe98.

upfront than diesel in every category by 2031 – and in some categories as early as this year. This means that the purchase of these vehicles will produce positive cashflow for fleets immediately.

EV CHARGING IS BENEFICIAL TO ELECTRIC UTILITIES AND RATEPAYERS

There's a misconception that widespread charging of EVs will necessarily stress the electric grid, resulting in costly upgrades that drive up electric rates. However, analysis of the two utility service territories with the most EVs of any in the U.S., Pacific Gas & Electric (PG&E) and Southern California Edison (SCE), conducted by Synapse Energy Economics ("Synapse") found the opposite has been observed in the real world.

EVs are pushing electric rates down, largely because they tend to charge overnight when people are sleeping and there is plenty of spare capacity on the grid. In particular, EV customers on time-of-use (TOU) rates, only do 9-14 percent of their charging during on-peak hours when total demand for electricity is at its greatest. And even EV owners that remain on default rates that do not encourage off-peak charging consume less electricity during on-peak hours than typical households.

EVs are not straining the grid to this point, Thus, there is little to no increased utility costs associated with accommodating EV charging, but significant new revenues that is returned to all customers in the form of lower rates and bills.

Synapse evaluated the revenues and costs associated with EVs from 2012 through 2019 in the PG&E and SCE service territories. They compared the new revenue the utilities collected from EV drivers to the cost of the energy required to charge those vehicles, plus the costs of any associated upgrades to the distribution and transmission grid and the costs of utility EV programs that are deploying charging stations for all types of EVs.

In total, EV drivers contributed an estimated $806 million more than the associated costs. And this finding is not merely a result of the fact most EV drivers in PG&E and SCE territory remain on default rates and pay high upper-tier prices as a result. Even if 3 in 4 were on time-of-use rates designed for EVs, those drivers would still have provided approximately $621 million in net-revenues.

ADOPTION OF THE ADVANCED CLEAN TRUCK REGULATIONS BY DECEMBER IS VITAL

The federal Clean Air Act requires two years of lead time before a state can enforce a California motor vehicle emission standard.[8] If MDE fails to finalize the rules before December 31, 2023, Maryland will lose a compliance year and the rule's implementation will be delayed.

[8] 42 U.S.C. § 7507(2).

As noted above, several states have already adopted the Advanced Clean Truck Rule. Because these states met Clean Air Act-related deadlines to issue the rules before the end of the year, these states can begin to enforce the rules, reduce air pollution, and protect public health earlier than they could have otherwise. Maryland is being left behind in the transition to clean, electric trucks.

Maryland signed the MOU almost two years ago and cannot afford to lose another year of implementation. The MOU establishes a 30% sales goal by 2030. Each year of delay makes it much harder and much less likely that Maryland will achieve the initial goal set forth in the MOU.

CONCLUSION

The rule's adoption will result in climate and public health benefits, net savings to fleets operating zero-emission trucks, and benefits to commercial and residential electricity customers due to lower electricity rates made possible by additional electricity sales for electric vehicle charging.

Finally, Earthjustice thanks Delegates Love, Fraser-Hidalgo, Charkoudian, Foley, Guyton, Moon, Queen, Terrasa, Turner and Vogel for their leadership on this important issue.

Earthjustice strongly urges a favorable report for HB 230.

Thank you in advance for your support. Should you have any questions, please contact me at smiller@earthjustice.org.

Respectfully submitted,

Susan Stevens Miller
Senior Attorney, Clean Energy Program
Earthjustice

COG CEEPC Comment Letter Supporting HB 230.pdf
Uploaded by: Timothy Masters
Position: FAV

Metropolitan Washington
Council of Governments

February 1, 2023

The Honorable Kumar P. Barve
Chair of the House Environment and Transportation Committee
Delegate, Maryland General Assembly
Taylor House Office Building, Room 251
6 Bladen Street
Annapolis, Maryland 21401

RE: Support for HB 230, Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)

Dear Delegate Barve:

On behalf of the Climate, Energy, and Environment Policy Committee (CEEPC) of the Metropolitan Washington Council of Governments (COG), I am writing in support of HB 230, which requires the Maryland Department of the Environment to adopt regulations on or before December 1, 2023, that establish requirements for the sale of new zero-emission medium- and heavy-duty vehicles in the State of Maryland.

Climate change is a regional priority for COG, the association of local governments in metropolitan Washington. Medium- and heavy-duty vehicles are responsible for 27 percent of transportation emissions and 10 percent of total greenhouse gas (GHG) emissions in metropolitan Washington. Electrification of the vehicle fleet is one of the highest impact strategies for reducing GHG emissions between now and 2030. Local policies and programs to accelerate the adoption of zero-emission medium- and heavy-duty vehicles, such as those required by HB 230, have the potential to significantly reduce emissions. As such, COG supports the adoption of these zero-emission medium- and heavy-duty vehicles requirements.

Please contact Jeffrey King, COG Director of Climate, Energy, and Air Programs at (202) 962-3238 or jking@mwcog.org if you have any questions. Thank you for your consideration.

Sincerely,

Takis Karantonis
Chair, Climate, Energy, and Environment Policy Committee

cc: Honorable Dana M. Stein
Honorable Jacqueline T. Addison
Honorable Nick Allen
Honorable Terry L. Baker

The Honorable Kumar P. Barve
February 1, 2023

Honorable Regina T. Boyce
Honorable Barrie S. Ciliberti
Honorable Debra M. Davis
Honorable Linda K. Foley
Honorable Michele J. Guyton
Honorable Anne Healey
Honorable Marvin E. Holmes, Jr.
Honorable Jay A. Jacobs
Honorable Mary A. Lehman
Honorable Jeffrie E. Long, Jr.
Honorable Sara N. Love
Honorable Todd B. Morgan
Honorable Ryan Nawrocki
Honorable Charles J. Otto
Honorable Sheila S. Ruth
Honorable Vaughn M. Stewart
Honorable Jennifer R. Terrasa
Honorable Natalie Ziegler
Honorable David Fraser-Hidalgo
Honorable Lorig Charkoudian
Honorable David Moon
Honorable Pamela E. Queen
Honorable Veronica L. Turner
Honorable Joseph Vogel

HB230_Higgins_FAV
Uploaded by: Will Higgins
Position: FAV

NIKOLA

February 7, 2023

Environment and Transportation Committee
Room 251
House Office Building
Annapolis, Maryland 21401

HB230 Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)

Position: Favorable

Chair Barve, Vice Chair Stein, and Members of the Committee:

Nikola Corporation appreciates the opportunity to provide testimony in support of HB230, Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023). This measure requires the Maryland Department of the Environment to adopt, by reference, California's Advanced Clean Trucks (ACT) rule by December 1, 2023. As a company committed to decarbonizing heavy transport, we believe the aggressive standards set by the ACT rule will go a long way toward advancing Maryland's objectives regarding greenhouse gas (GHG) emission reductions, improving air quality, and ensuring a just transition with green, equitable, high-quality jobs for Maryland residents.

GHG emissions from transportation account for about 28 percent of total greenhouse gas emissions in the United States, with commercial trucks playing a key role contributing 23% of the total carbon emissions from the transportation sector, following passenger vehicles[1]. The transportation sector is Maryland's largest source of GHG emissions, accounting for more than 24% of carbon emissions in the state.[2]

As a global leader in zero-emission transportation and energy supply and infrastructure solutions, Nikola firmly believes that the electrification of medium and heavy-duty vehicles in the transportation sector is critical to reducing carbon emissions. Nikola and other manufacturers in the sector stand ready, with numerous zero-emission medium and heavy-duty vehicle and charging offerings available

[1] https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

[2] https://mde.maryland.gov/programs/air/ClimateChange/Pages/GreenhouseGasInventory.aspx

now. Nikola began serial production of the Tre BEV in March 2022. The Tre BEV is a cabover battery electric truck for short-haul metro-regional applications with a maximum range of up to 330 miles. The company expects to begin delivery of its longer-range hydrogen fuel cell truck, the Tre FCEV, in quarter 4 of 2023, and recently announced the creation of a new global brand, HYLA, Nikola's recently launched hydrogen energy brand, to encompass the company's energy products for producing, distributing, and dispensing hydrogen.

Nikola is committed to growing its zero-emission transportation and infrastructure operations in Maryland, with the support of our local dealer, Ethero. The adoption of California's ACT will play a critical role in cultivating and accelerating market and fleet adoption of zero-emission truck technology. Moreover, if Maryland adopts the ACT rule, the state will be well-positioned to build a market centered around the transition to clean fuels, improving public health, and will also help the state achieve its climate goals in a timely manner.

We appreciate your consideration of our testimony and urge a favorable report on HB230.

Thank you,

Will Higgins

State and Local Affairs Manager, Eastern US

Nikola Corporation

HB230 - Maryland Motor Truck Association - Favorab
Uploaded by: Louis Campion
Position: FWA

Maryland Motor Truck Association

9256 Bendix Road, Suite 203, Columbia, MD 21045
Phone: 410-644-4600 Fax: 410-644-2537

HEARING DATE: February 8, 2023

BILL NO/TITLE: **House Bill 230 – Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)**

COMMITTEE: House Environment & Transportation

POSITION: **Favorable with Amendments**

Maryland Motor Truck Association (MMTA) recognizes the continued need to lower greenhouse gas emissions from the transportation sector. The trucking industry is fuel neutral; however, we must have access to a readily available fuel supply that meets our operational needs so that we can deliver the food, clothing, medical supplies and other products that citizen's need.

MMTA members are testing electric trucks on a very limited basis. Drivers are offering positive feedback as the trucks have less noise, lower emissions, and a smoother ride. Primarily those members are engaged in medium-duty local delivery operations where the truck returns to its home terminal each day and has access to on-site charging. However, there are large segments of the trucking industry that are not currently suitable for electrification. Those trucks are unlikely to be able to meet our operating needs in accordance with the timetable that would be mandated with the passage of HB230.

There are a number of challenges to deployment of electric trucks in Maryland. These include grid capacity, lack of charging infrastructure, permitting, battery range and weight, cost, and lost payload to name just a few. HB230 attempts to move us further down the path to electrification, however, prior to automatically advancing California's standard, MMTA believes proper study and planning is warranted. As such MMTA offers support for HB230, but with amendments that require the state to conduct a needs assessment and develop an implementation plan. The amendments also allow for the delayed implementation of the Advance Clean Trucks regulation if the needs assessment determines that the state is not prepared for successful implementation of the California rule and manufacturers cannot meet the sales thresholds required.

With regards to electrification, the trucking industry is 10 years behind the car industry. A conversation about necessary incentives, infrastructure development, and the timeline for a realistic transition needs to occur. MMTA believes the amendments we have offered provide a chance to do that. Yes, ZEV trucks are coming, but it does not make sense to simply adopt an artificial mandate that cannot be achieved in our state without proper planning and development.

For the reasons noted above, MMTA asks for a favorable report with the amendments the association has offered.

About Maryland Motor Truck Association: Maryland Motor Truck Association is a non-profit trade association representing the trucking industry since 1935. In service to its 1,000 members, MMTA is committed to support, advocate and educate for a safe, efficient and profitable trucking industry in Maryland.

For further information, contact: Louis Campion, (c) 443-623-4223

Amendments to House Bill 230 – 1st Reader
Offered by Maryland Motor Truck Association

- On page 2, in line 11, strike “vehicle standards” and replace it with “ADVANCE CLEAN TRUCKS REGULATION”
- On page 2, after line 11, insert:

(III) TAKE EFFECT STARTING IN MODEL YEAR 2027.

(C) ON OR BEFORE DECEMBER 1, 2024, THE DEPARTMENT OF THE ENVIRONMENT, THE DEPARTMENT OF TRANSPORTATION, AND THE MARYLAND ENERGY ADMINISTRATION SHALL PREPARE AND SUBMIT TO THE LEGISLATURE A NEEDS ASSESSMENT AND DEPLOYMENT PLAN RELATING TO THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION IN MARYLAND, WHICH SHALL, AMONG OTHER THINGS:

(I) ASSESS AND PLAN FOR THE ADDITIONAL ELECTRICAL CAPACITY, TRANSMISSION AND DISTRIBUTION DEMANDS THAT WILL NEED TO BE MET TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE CAPABILITY OF THE STATE’S UTILITIES AND GRID TO MEET THOSE DEMANDS;

(II) ASSESS AND PLAN FOR THE NUMBER OF HEAVY-DUTY AND MEDIUM-DUTY ZEV-RECHARGING AND HYDROGEN-REFUELING STATIONS THAT WILL BE REQUIRED IN THE STATE TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE COSTS, PERMITTING ISSUES, AND NECESSARY TIMELINES FOR INSTALLING THOSE STATIONS;

(III) ASSESS AND PLAN FOR THE ZEV PURCHASE INCENTIVES THAT WILL BE REQUIRED TO ENSURE THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION, AND THE POTENTIAL SOURCES OF THAT INCENTIVE FUNDING; AND

(IV) ASSESS AND PLAN FOR WHEN AND HOW QUICKLY STATE MEDIUM AND HEAVY-DUTY VEHICLE FLEET OPERATIONS, INCLUDING STATE-CONTRACTED MEDIUM AND HEAVY-DUTY VEHICLES, CAN BE CONVERTED TO ZERO-EMISSIONS.

(D) THE DEPARTMENT OF THE ENVIRONMENT SHALL PROVIDE REGULATORY MECHANISMS TO ALLOW FOR THE DELAY OF THE IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION BY ONE OR MORE MODEL YEARS IF THE DEPARTMENT DETERMINES, IN CONSULTATION WITH THE DEPARTMENT OF TRANSPORATION AND THE MARYLAND ENERGY ADMINISTRATION, THAT THE IMPLEMENTATION CRITERIA IDENTIFIED THROUGH THE NEEDS ASSESSMENT AND DEPLOYMENT PLAN HAVE NOT BEEN MET.

HB 230_MAA_FWA.pdf
Uploaded by: Nicolae Copper
Position: FWA

MARYLAND ASPHALT ASSOCIATION
SINCE 1954

February 8, 2023

Delegate Kumar Barve, Chair
House Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

RE: HB 230 – <u>FAVORABLE WITH AMENDMENTS</u> – Department of the Environment – Zero-Emission Medium- and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Dear Chair Barve and Members of the Committee:

The Maryland Asphalt Association (MAA) is comprised of 18 producer members representing more than 47 production facilities, 24 contractor members, 24 consulting engineer firms and 41 other associate members. MAA works proactively with regulatory agencies to represent the interests of the asphalt industry both in the writing and interpretation of state and federal regulations that may affect our members. We also advocate for adequate state and federal funding for Maryland's multimodal transportation system.

House Bill 230 requires the Maryland Department of the Environment to adopt regulations regarding the sale of new zero-emission medium- and heavy-duty vehicles in the state by December 1, 2023. These regulations must incorporate by reference the recently adopted California Air Resources Board's vehicle standards.

While MAA recognizes the impact of climate change, the regulatory directive proposed by House Bill 230 is shortsighted and too unwieldy to be accomplished in a six-month timeframe. If it is the will of the Committee to enact legislation to address this issue, we respectfully ask that the Committee incorporate the amendments proffered by the Maryland Motor Truck Association. These amendments address several critical shortcomings of the bill as proposed. For example, they would specify which California regulations must be incorporated by reference and give the industry four years to phase them in. In addition, they would create a second reporting deadline of December 1, 2024 for the submission of a detailed implementation plan aimed at preparing our infrastructure for the forthcoming changes, such as assessing the additional impact on the state's electric grid, increasing geographic coverage of public recharging stations, and outlining the level of purchase incentives that will be required to meet the goals of implementation.

MAA would add that the implementation plan should also make recommendations on the purchase and zoning of storage and disposal facilities adequate to process the inevitable influx of spent batteries, fuel cells, and other critical components brough on by the shift to zero-emission vehicles; moreover, MAA

believes that the Administration should be required to conduct a complete environmental impact study of those facilities, including a period for public review and comment, prior to the effective date of the regulations.

We appreciate you taking the time to address our request on House Bill 230.

Sincerely,

Marshall Klinefelter
President
Maryland Asphalt Association

HB 230_MTBMA_FWA.pdf
Uploaded by: Nicolae Copper
Position: FWA

MTBMA
MARYLAND TRANSPORTATION
BUILDERS AND MATERIALS ASSOCIATION

February 8, 2023

Delegate Kumar Barve, Chair
House Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

RE: HB 230 – <u>FAVORABLE WITH AMENDMENTS</u> – Department of the Environment – Zero-Emission Medium- and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Dear Chair Barve and Members of the Committee:

The Maryland Transportation Builders and Materials Association ("MTBMA") has been and continues to serve as the voice for Maryland's construction transportation industry since 1932. Our association is comprised of 200 members. MTBMA encourages, develops, and protects the prestige of the transportation construction and materials industry in Maryland by establishing and maintaining respected relationships with federal, state, and local public officials. We proactively work with regulatory agencies and governing bodies to represent the interests of the transportation industry and advocate for adequate state and federal funding for Maryland's multimodal transportation system.

House Bill 230 requires the Maryland Department of the Environment to adopt regulations regarding the sale of new zero-emission medium- and heavy-duty vehicles in the state by December 1, 2023. These regulations must incorporate by reference the recently adopted California Air Resources Board's vehicle standards.

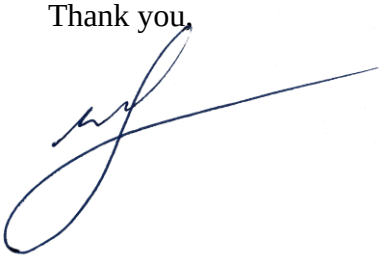
While MTBMA recognizes the impact of climate change, the regulatory directive proposed by House Bill 230 is shortsighted and too unwieldy to be accomplished in a six-month timeframe. If it is the will of the Committee to enact legislation to address this issue, we respectfully ask that the Committee incorporate the amendments proffered by the Maryland Motor Truck Association. These amendments address several critical shortcomings of the bill as proposed. For example, they would specify which California regulations must be incorporated by reference and give the industry four years to phase them in. In addition, they would create a second reporting deadline of December 1, 2024 for the submission of a detailed implementation plan aimed at preparing our infrastructure for the forthcoming changes, such as assessing the additional impact on the state's electric grid, increasing geographic coverage of public recharging stations, and outlining the level of purchase incentives that will be required to meet the goals of implementation.

MTBMA would add that the implementation plan should also make recommendations on the purchase and zoning of storage and disposal facilities adequate to process the inevitable influx of spent batteries, fuel cells, and other critical components brough on by the shift to zero-emission vehicles; moreover,

MTBMA believes that the Administration should be required to conduct a complete environmental impact study of those facilities, including a period for public review and comment, prior to the effective date of the regulations.

We appreciate you taking the time to address our request on House Bill 230.

Thank you,



Michael Sakata
President and CEO
Maryland Transportation Builders and Materials Association

Volvo Group North American Testimony HB230 .pdf
Uploaded by: Richard Tabuteau
Position: FWA

VOLVO

TO: The Honorable Kumar Barve, Chair
Members, House Environment & Transportation Committee
The Honorable Sara Love

FROM: Richard A. Tabuteau

DATE: February 8, 2023

RE: **FAVORABLE WITH AMENDMENT** – House Bill 230 – *Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)*

The Volvo Group drives prosperity through transport and infrastructure solutions, offering trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase our customers' uptime and productivity. Founded in 1927, the Volvo Group is committed to shaping the future landscape of sustainable transport and infrastructure solutions. The Volvo Group employs more than 100,000 people worldwide and serves customers in more than 190 markets. Volvo Group North America employs around 14,000 people in the United States and operates 11 manufacturing and remanufacturing facilities in seven states.

In Maryland, Volvo Group North America's Hagerstown Powertrain Production facility employs nearly 2,000 people including over 1,400 members of the UAW Locals 171 and 1247 and is the last major automotive manufacturer in the state. The plant develops, manufactures, and tests heavy-duty powertrains, transmissions and axles for its Mack and Volvo trucks as well as Prevost and Volvo buses at its 280-acre campus. Volvo Group also employs more than 60 people at one of its U.S. parts distribution facilities in Elkridge.

In 2020, the Volvo Group made a global commitment to having 100% of its product sales being fossil free by 2040, including a nearer term goal of 35% of product sales being zero-emission by 2030. The Hagerstown plant plays a key role in this transition through the manufacturing of all modular power boxes for the Volvo VNR electric and Mack LR electric Class 8 trucks. It has also taken action to reduce its own emissions through completion of two solar installations and committing to using 100% renewable sources to meet its energy needs, part of overall energy efficiency measures under the U.S. Energy Department's Better Buildings Better Plants Program.

House Bill 230 requires the Maryland Department of the Environment, by December 1, 2023, to adopt regulations establishing requirements for the sale of new zero-emission medium- and heavy-duty vehicles in the State. The regulations must update existing regulations and

incorporate by reference the California Air Resources Board's (CARB) vehicle standards, as revised and updated.

Volvo and Mack Trucks are the North American industry leaders in Zero-Emission (ZE) Class 8 trucks. We applaud Delegate Love's commitment to the environment and share the same goal of accelerating medium- and heavy-duty zero-emission vehicles in the marketplace; however, we don't believe that Maryland's adoption of the Advanced Clean Truck regulation (ACT) can succeed without careful planning and creation of a supportive ecosystem for these vehicles.

House Bill 230 effectively mandates that Volvo Group and its competitors sell pre-established percentages of ZE Class 8 trucks each year without incorporating measures to address numerous structural impediments to achieving those sales. For example, this bill, as introduced, does not provide any financial support for power assessments of the electricity grid or installation of necessary charging infrastructure that must precede the utilization of these vehicles. Electric trucks are not big electric cars. They use completely different charging hardware, need more parking space, and have batteries that are about 5x larger, 5x heavier, 5x more powerful, and 5x more expensive than light-duty vehicles. Currently, it does not appear that the state's major utilities or the grid operators are remotely prepared to handle the anticipated electrical load that will be needed to support this sales mandate.

In addition, these early ZE Class 8 trucks are approximately 2-3 times more expensive than their diesel-powered equivalents. This, together with the cost of installing charging infrastructure and equipment, makes it virtually impossible for commercial fleets to absorb these higher up-front costs until the vehicle's total cost of ownership is similar to that of today's vehicles. We understand Governor Moore has an incentives package for ZE Class 8 truck purchases and charging infrastructure investments. We share the Administration's belief that incentives and other supportive policies must be adopted to ensure a successful transition to a ZE Class 8 truck future. Sustained funding for these purchase incentives is also necessary.

Sustained adoption of ZE Class 8 trucks requires a complex network of programs, policies, and regulations to facilitate cooperation across multiple key stakeholders, including energy providers – utilities and grid operators, charger manufacturers, state and local government officials, component suppliers, commercial fleets, dealerships, and many others. House Bill 230 only addresses one facet of this ecosystem and will fail unless additional measures are adopted to complement the ACT's sales mandate percentages.

Below are amendments that Volvo Group believes could make adoption of the Advanced Clean Truck regulation feasible in Maryland, beginning Page 2, Line 10:

"(II) INCORPORATE BY REFERENCE THE CALIFORNIA AIR RESOURCES BOARD'S ADVANCE CLEAN TRUCKS REGULATION, AS REVISED AND UPDATED.

(III) TAKE EFFECT STARTING IN MODEL YEAR 2027.

(C) ON OR BEFORE DECEMBER 1, 2024, THE DEPARTMENT OF THE ENVIRONMENT, THE DEPARTMENT OF TRANSPORTATION, AND THE MARYLAND ENERGY ADMINISTRATION SHALL PREPARE AND SUBMIT TO THE LEGISLATURE A NEEDS ASSESSMENT AND DEPLOYMENT PLAN RELATING TO THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION IN MARYLAND, WHICH SHALL, AMONG OTHER THINGS:

(I) ASSESS AND PLAN FOR THE ADDITIONAL ELECTRICAL CAPACITY, TRANSMISSION AND DISTRIBUTION DEMANDS THAT WILL NEED TO BE MET TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE CAPABILITY OF THE STATE'S UTILITIES AND GRID TO MEET THOSE DEMANDS;

(II) ASSESS AND PLAN FOR THE NUMBER OF HEAVY-DUTY AND MEDIUM-DUTY ZEV RECHARGING AND HYDROGEN-REFUELING STATIONS THAT WILL BE REQUIRED IN THE STATE TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE COSTS, PERMITTING ISSUES, AND NECESSARY TIMELINES FOR INSTALLING THOSE STATIONS;

(III) ASSESS AND PLAN FOR THE ZEV PURCHASE INCENTIVES THAT WILL BE REQUIRED TO ENSURE THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION, AND THE POTENTIAL SOURCES OF THAT INCENTIVE FUNDING; AND

(IV) ASSESS AND PLAN FOR WHEN AND HOW QUICKLY STATE MEDIUM AND HEAVY DUTY VEHICLE FLEET OPERATIONS, INCLUDING STATE-CONTRACTED MEDIUM AND HEAVY DUTY VEHICLES, CAN BE CONVERTED TO ZERO-EMISSIONS.

(D) THE DEPARTMENT OF THE ENVIRONMENT SHALL PROVIDE REGULATORY MECHANISMS TO ALLOW FOR THE DELAY OF THE IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION BY ONE OR MORE MODEL YEARS IF THE DEPARTMENT DETERMINES, IN CONSULTATION WITH THE DEPARTMENT OF TRANSPORATION AND THE MARYLAND ENERGY ADMINISTRATION, THAT THE IMPLEMENTATION CRITERIA IDENTIFIED THROUGH THE NEEDS ASSESSMENT AND DEPLOYMENT PLAN HAVE NOT BEEN MET."

Volvo Group urges the House Environment & Transportation Committee to adopt the proffered amendments for House Bill 230.

For more information call:
Richard A. Tabuteau
347.886.2904

EMA Testimony - HB 230 (favorable with amendments)

Uploaded by: Timothy French

Position: FWA

Truck & Engine Manufacturers Association®
Bringing Clean Power to the World™

333 West Wacker Drive, Suite 810
Chicago, Illinois, 60606
Phone/Fax: (312) 929-1970
www.truckandenginemanufacturers.org

SB 224/HB 230
Timothy A. French (tfrench@clpchicago.com)
Truck and Engine Manufacturers Association

Favorable Only With Amendments

EMA Testimony on Maryland Legislation to Incorporate by Reference California's Advanced Clean Truck Rule

The Truck and Engine Manufacturers Association (EMA) respectfully opposes the proposed bill, as currently drafted, to incorporate by reference California's Advanced Clean Trucks (ACT) regulations because those increasing ZEV-truck sales mandates, unaccompanied by any provisions to ensure that the necessary ZEV-truck purchase incentives and infrastructure build-out are assessed and planned for, will frustrate, not foster, the accelerated deployment of ZEV trucks in Maryland. EMA represents the world's leading manufacturers of medium-duty and heavy-duty trucks and truck engines — the types of commercial vehicles that would be covered under the proposed opt-in to California's ACT Rule. EMA actively participated in the underlying California rulemaking process.

EMA and its members fully support a conversion of the commercial trucking fleet to ZEVs, and agree that 2040 could be a reasonable target date for the broad deployment of ZEV trucks wherever feasible. EMA members are spending billions of dollars toward that end, and already are producing ZEVs for some applications. However, to bring about our shared vision for the future, a **comprehensive and coordinated state and federal strategy is required** to develop and implement the widespread deployment of ZEV trucks, not the adoption of naked stand-alone state-specific ZEV-truck sales mandates.

To ensure the successful deployment of ZEV trucks on an accelerated timeline, very large public investments will be required **up-front**, not after ZEV-sales mandates take effect. More

specifically, a critical first step in accelerating the deployment of ZEV trucks – **before** the imposition of increasing sales mandates under CARB's ACT program – is the assessment and establishment of a comprehensive program to invest in and develop the robust electric and hydrogen infrastructure necessary to recharge or refuel ZEV trucks. Maryland can and must be a leader in those broad-based **up-front** ZEV-readiness efforts which, for trucks, will involve longer infrastructure-planning and installation timelines (for both battery-powered and hydrogen-fueled trucks), much greater demands on the State's electricity grid and inter-connections, and significantly larger public investments than for passenger cars.

In addition, since the cost of a ZEV-truck is currently 2-3 times higher than for a conventionally-fueled truck, and since there is no obligation under the ACT program that any fleet operator **buy** a more costly ZEV truck, other significant public investments will need to be assessed and implemented in Maryland. In particular, and as another critical first step **before** implementing CARB's ACT Rule, Maryland will need to assess and provide sustained incentive funding to offset the significantly higher price differential for ZEV trucks. Otherwise, the assumed increasing purchases of ZEV trucks will simply not occur. Moreover, Maryland should set an example by requiring the purchase of ZEV trucks for a portion of all of the State's purchases of new heavy-duty vehicles going forward.

EMA and other stakeholders have discussed with Delegate Love and other legislators potential amendments to the bill at issue that would address the significant concerns that EMA has raised. A copy of the potential amendments that EMA would support is attached. The proposed amendments – which include directives for the relevant State agencies to assess and plan for the necessary ZEV-infrastructure build-out and ZEV-purchase incentives – will greatly enhance the prospects for successfully accelerating the deployment of ZEV trucks in Maryland.

In sum, successfully implementing California's ACT Rule in Maryland will require the State to assess and plan for the significant ZEV-truck infrastructure and ZEV-truck purchase incentives that will be necessary to ensure the deployment of heavy-duty and medium-duty ZEVs on the timeline and at the rate spelled out in the ACT Rule. The proposed amendments will help to ensure that the necessary planning is completed and implemented in a timely manner **before** the ACT sales mandates take effect, and will result in the type of opt-in legislation that other States can and should look to as they consider how best to transition the vitally important goods-movement industry to ZEVs. Accordingly, if the attached amendments to the bill are adopted, EMA could support its enactment.

HOUSE BILL 230

M3 3lr1059
HB 829/22 – ENT CF SB 224

By: **Delegates Love, Fraser–Hidalgo, Charkoudian, Foley, Guyton, Moon, Queen, Terrasa, Turner, and Vogel**
Introduced and read first time: January 23, 2023 Assigned to:
Environment and Transportation

A BILL ENTITLED

AN ACT concerning

Department of the Environment – Zero–Emission Medium– and Heavy–Duty Vehicles – Regulations
(Clean Trucks Act of 2023)

FOR the purpose of requiring the Department of the Environment to adopt regulations on or before a certain date establishing requirements for the sale of new zero–emission medium– and heavy–duty vehicles in the State; and generally relating to the sale of zero–emission vehicles in the State.

BY adding to
Article – Environment Section 2–
1103.1
Annotated Code of Maryland
(2013 Replacement Volume and 2022 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article – Environment

2–1103.1.

(A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(2) "HEAVY–DUTY VEHICLE" MEANS A VEHICLE WITH A GROSS VEHICLE WEIGHT RATING EQUAL TO OR GREATER THAN 14,001 POUNDS.

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

hb0230

(3) "MEDIUM–DUTY VEHICLE" MEANS A VEHICLE WITH A GROSS VEHICLE WEIGHT RATING OF NOT LESS THAN 8,501 POUNDS AND NOT MORE THAN 14,000 POUNDS.

(B) (1) ON OR BEFORE DECEMBER 1, 2023, THE DEPARTMENT SHALL ADOPT REGULATIONS ESTABLISHING REQUIREMENTS FOR THE SALE OF NEW ZERO–EMISSION MEDIUM– AND HEAVY–DUTY VEHICLES IN THE STATE.

(2) THE REGULATIONS ADOPTED UNDER PARAGRAPH (1) OF THIS SUBSECTION SHALL:

(I) UPDATE EXISTING REGULATIONS; AND

(II) INCORPORATE BY REFERENCE THE CALIFORNIA AIR RESOURCES BOARD'S ~~VEHICLE STANDARDS~~ ADVANCE CLEAN TRUCKS REGULATION, AS REVISED AND UPDATED.

(III) TAKE EFFECT STARTING IN MODEL YEAR 2027.

(C) ON OR BEFORE DECEMBER 1, 2024, THE DEPARTMENT OF THE ENVIRONMENT, THE DEPARTMENT OF TRANSPORTATION, AND THE MARYLAND ENERGY ADMINISTRATION SHALL PREPARE AND SUBMIT TO THE LEGISLATURE A NEEDS ASSESSMENT AND DEPLOYMENT PLAN RELATING TO THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION IN MARYLAND, WHICH SHALL, AMONG OTHER THINGS:

(I) ASSESS AND PLAN FOR THE ADDITIONAL ELECTRICAL CAPACITY, TRANSMISSION AND DISTRIBUTION DEMANDS THAT WILL NEED TO BE MET TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE CAPABILITY OF THE STATE'S UTILITIES AND GRID TO MEET THOSE DEMANDS;

(II) ASSESS AND PLAN FOR THE NUMBER OF HEAVY-DUTY AND MEDIUM-DUTY ZEV-RECHARGING AND HYDROGEN-REFUELING STATIONS THAT WILL BE REQUIRED IN THE STATE TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE COSTS, PERMITTING ISSUES, AND NECESSARY TIMELINES FOR INSTALLING THOSE STATIONS;

(III) ASSESS AND PLAN FOR THE ZEV PURCHASE INCENTIVES THAT WILL BE REQUIRED TO ENSURE THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION, AND THE POTENTIAL SOURCES OF THAT INCENTIVE FUNDING; AND

(IV) ASSESS AND PLAN FOR WHEN AND HOW QUICKLY STATE MEDIUM AND HEAVY-DUTY VEHICLE FLEET OPERATIONS, INCLUDING STATE-CONTRACTED MEDIUM AND HEAVY-DUTY VEHICLES, CAN BE CONVERTED TO ZERO-EMISSIONS.

(D) THE DEPARTMENT OF THE ENVIRONMENT SHALL PROVIDE REGULATORY MECHANISMS TO ALLOW FOR THE DELAY OF THE IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION BY ONE OR MORE MODEL YEARS IF THE DEPARTMENT DETERMINES, IN CONSULTATION WITH THE DEPARTMENT OF TRANSPORATION AND THE MARYLAND ENERGY ADMINISTRATION, THAT THE IMPLEMENTATION CRITERIA IDENTIFIED THROUGH THE NEEDS ASSESSMENT AND DEPLOYMENT PLAN HAVE NOT BEEN MET.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2023.

MDE HB230 FWA.pdf
Uploaded by: Tyler Abbott
Position: FWA

The Maryland Department of the Environment
Secretary-Designee Serena McIlwain

HB0230
Department of the Environment – Zero–Emission Medium– and Heavy–Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Position: Favorable with Amendments
Committee: Environment and Transportation Committee
Date: February 08, 2023
From: Gabrielle Leach

The Maryland Department of the Environment (MDE) urges **FAVORABLE WITH AMENDMENTS** on House Bill 230. HB 230 will provide Maryland with the ability to expand the use of Medium Heavy-Duty (MHD) zero emission vehicles (ZEVs) in the State by requiring certain manufacturers of MHD trucks to sell ZEVs as an increasing percentage of annual truck and bus sales in Maryland.

Bill Analysis: This bill will require MDE to adopt the California Advanced Clean Truck Rule (ACT) by December 1, 2023. If adopted, the ACT would require certain manufacturers of MHD trucks to sell ZEVs as an increasing percentage of annual truck and bus sales in Maryland. ZEV sales would be phased-in beginning in Model Year (MY) 2027 and increase through MY 2035, remaining constant thereafter.

Position Rationale: Maryland's ability to expand the use of ZEVs into the MHD sector will play an important role in helping Maryland achieve its air quality and climate goals. Transportation accounts for almost half of all greenhouse gas (GHG) emissions generated in the State. The Climate Solutions Now Act (CSNA) established a statewide goal of a 60% reduction in GHG emissions from 2006 levels by 2031. Additionally, transportation is a significant source of nitrogen oxides (NOx) emissions that contribute to ground-level ozone pollution. In Maryland and the Northeast region, MHD trucks are the second leading contributor to both NOx and GHG emissions. Maryland has made a lot of progress over the past few decades towards clean air and is now measuring statewide attainment of all federal air quality standards for all criteria pollutants, including ozone. In order to achieve the CSNA goals and attain and maintain the federal air quality standards, further reductions from the transportation sector are needed, and electrification of this sector is one of the best reduction strategies.

The action proposed in this bill will allow Maryland to expand the use of ZEVs into the key MHD vehicle sector. Maryland has already been active in this area; in July of 2020, Maryland

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Contact: Gabrielle Leach, Deputy Director of the Legislation and Intergovernmental Affairs
410-260-6302 (Annapolis Office), 410-453-3235 (cell), Gabrielle.Leach@maryland.gov

joined sixteen other states and the District of Columbia in signing a MHD ZEV MOU. Under this MOU, a ZEV sales goal was established that by 2030 at least 30% of all MHD trucks sold in the MOU states would be ZEVs. To achieve this goal, a multi-state MHD ZEV Action Plan was released in summer 2022.

MHD ZEVs currently are more expensive than conventionally powered MHDs trucks and adequate recharging infrastructure will be needed to support these trucks. In addition, vehicle availability could be an early concern. However, as with all new technologies and markets, we do expect these challenges to be overcome as the market evolves, and Maryland agencies are using both federal and state resources to provide vehicle purchase rebates and to deploy recharging infrastructure. MDE also notes that more substantial increases in investment in ZEV charging infrastructure, other decarbonization measures, and new, dedicated funding sources for transportation decarbonization programs are necessary to achieve our goals and avoid significant impacts from climate change. As MDE continues to prioritize equity and environmental justice, we also support the flexibility to take additional benefits for communities with environmental justice concerns into account.

While the Department supports House Bill 230, it will have a fiscal impact on MDE. General funds will be needed to cover MDE's activities associated with the initial adoption of the required regulations as well as MDE's ongoing responsibilities under this bill. In order to maintain the program regulations and ensure compliance, track new truck sales and credits, oversee the administration of the ZEV Truck Credit, Banking and Trading Program, and perform other technical activities associated with this program, MDE would need, at a minimum, two new positions. Adopting the necessary regulations will also require MDE to conduct a stakeholder process prior to adoption. Contractual assistance will also be needed to facilitate the stakeholder process, develop the regulatory language, develop an environmental analysis of the program, and analyze the economic impacts.

Amendments: Due to the tight timeline to adopt the regulations, extending the deadline to adopt the regulations until December 31, 2023, instead of December 01, 2023, would be helpful. As long as the regulations are adopted by December 31, 2023 there would be no change to the MY captured by the regulations.

For the reasons detailed above, MDE urges a **FAVORABLE WITH AMENDMENTS** report for HB 230.

HB230_MDCC_Clean Trucks Act of 2023_UNFAV (2).pdf
Uploaded by: Andrew Griffin
Position: UNF

MARYLAND
Chamber of Commerce

LEGISLATIVE POSITION:
Unfavorable
House Bill 230
Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)
House Environment and Transportation Committee
Wednesday, February 8, 2023

Dear Chairman Barve and Members of the Committee:

Founded in 1968, the Maryland Chamber of Commerce is the leading voice for business in Maryland. We are a statewide coalition of more than 6,400 members and federated partners working to develop and promote strong public policy that ensures sustained economic recovery and growth for Maryland businesses, employees, and families.

House Bill 230 requires the Department of Environment to adopt California's Air Resources Board Vehicle Standards by December 1 of this year. These regulations will establish requirements for the sale of new zero-emission medium and heavy-duty vehicles (ZEV) in the state. Under this, auto manufacturers will be required to produce a certain number of ZEVs each year. That number is based on the total number of cars sold in California by the manufacturer.

The Maryland Chamber of Commerce understands the goal of this legislation and many of our members are working toward emission reduction goals. However, ZEV truck adoption is a very complex process and requires cooperation across key stakeholders. ZEV trucks use completely different chargers and there are zero public charging stations as of today. The batteries are 5x more expensive and the chargers are 4x more expensive. Additionally, successful deployment of ZEV trucks requires cooperation between manufacturers of both the vehicles and chargers, energy providers, component suppliers and dealerships. Lastly, preparation for such an endeavor will take, at minimum, 12 months.

Truck buying is a unique process, in that you don't buy a new truck off a dealer's lot. Instead, you work with a dealer on specifications and price, and they place an order from a manufacturer and then deliver the vehicle to the purchaser. Ultimately, many companies that require these trucks will take their business out of state to jurisdictions that are able to order what they need. As Maryland businesses continue to prepare for a potential economic recession, now is not the time to place added burdens and costs on our businesses.

With these concerns in mind, the Maryland Chamber of Commerce respectfully requests an **unfavorable report** on **HB 230**.

API oppose SB 224 and HB 230.pdf
Uploaded by: Bernie Marczyk
Position: UNF

American Petroleum Institute
Northeast Region

Michael S. Giaimo Northeast Region Director
giaimom@api.org
603.777.0467 (cell)

American Petroleum Institute
Comments Relative to SB 224 and HB 230 (Clean Trucks Act of 2023)
February 8, 2023

The American Petroleum Institute (API)[1] appreciates the state's desire to be at the front of the curve with respect to energy and environmental policies. While some legislators may believe that SB 224 and HB 230 will help effectuate that goal, API encourages Maryland policymakers to retain state sovereignty and refrain from acceding authority to California by having the state automatically adopt California's medium- and heavy-duty truck rules.

API specifically recommends that the state not effectively delegate its authority by having laws and rules that "incorporate by reference" California's rules "as revised and updated." API supports policies that provide customer choice with respect to vehicle purchases and emphasize the need to have the market and technology dictate the evolution of the truck fleet, which in turn can help address consumer cost concerns.

The free market has a proven track record of demonstrating that competition has achieved policy objectives and effectuated advanced technology at a reduced cost to the consumer. Maryland should support policies that allow all technologies, including biofuel blends, battery electric vehicles, hybrids and efficient gasoline and diesel vehicles to compete in the marketplace. These types of policies can be developed to ensure that the most efficient and effective technologies are implemented to achieve the goal of reducing GHG emissions in the transportation sector.

Industry members are applying their abilities and resources to meet emission reduction policies in the transportation sector in a manner that allows Maryland, and all consumers, the ability to choose the technology that best meets their needs. As the association representing the natural gas and oil industry, we are uniquely positioned to think about fuels, safety, and innovation for the next generation. API welcomes discussion on viable solutions to the dual challenge of ensuring reliable and affordable energy supplies to support economic growth and human prosperity, while advancing environmental progress.

API strongly encourages Maryland's legislature to retain its authority to review the actions of the Department of the Environment to direct the agency to adopt different rules, or to set different emissions standards through legislation. Through SB 224, Maryland would allow but not require the Department of the Environment to "incorporate by reference" California's rules "as revised and updated." Presumably, Maryland intends to automatically include into state regulations all future amendments to the California regulations.

Currently, Maryland's Low Emissions Vehicle Program regulations incorporate by reference certain enumerated sections of Title 13 of the California Code of Regulations, which do not include California's requirements for the sale of new zero- emission medium- and heavy-duty vehicles adopted in 2021 through its Advanced Clean Trucks rules.[2]

[1] The American Petroleum Institute represents all segments of America's natural gas and oil industry, which supports more than ten million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. Our 600 members produce, process and distribute the majority of the nation's energy, and participate in API Energy Excellence, which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standards-setting organization and has developed more than 700 standards to enhance operational and environmental safety, efficiency, and sustainability.

[2] See Md. Code Regs. 26.11.34.01 et. seq. at https://www.law.cornell.edu/regulations/maryland/title-26/part-2/subtitle-11/chapter-26.11.34.

Michael S. Giaimo Northeast Region Director
giaimom@api.org
603.777.0467 (cell)

Historically, when California has conducted a major update to the rules it has done so by promulgating entirely new sections within the California Code of Regulations, such as through its Advanced Clean Trucks rulemaking. That rulemaking adopted new sections 1963, 1963.1, 1963.2, 1963.3, 1963.4, and 1963.5 of Title 13 of the California Code of Regulations, along with new sections 2012, 2012.1, and 2012.2 of Title 13, codified under new article 3.1.[3] SB 224 was filed to adopt those provisions because the Maryland statute presently requires the state to follow California standards for light duty motor vehicles only, and the new sections were not (and could not have been) among those previously enumerated and incorporated.[4]

Maryland should retain jurisdiction over its air rules rather than incorporate by reference California standards. This will prevent substantive changes from automatically taking effect in the state if California adopts those changes by amending existing sections of its Code of Regulations that have been previously incorporated in Maryland. What is best for California is not necessarily what is best for Maryland.

Under existing state law Maryland can cite specific California regulations and still follow the Maryland regulatory process. This is a prudent and practical approach and ensures a thorough and deliberate debate and rulemaking process before implementing rules from a state that has different needs than Maryland.

Furthermore, given that Maryland's needs may vary from time to time, it makes sense from time to time to have the state's environmental regulators and the legislature (through its legislative oversight authority) consider the appropriate regulations for the state and not simply defer that responsibility to another state's air resources board.

In conclusion, automatically adopting future California rules without review by Maryland constituents and businesses bypasses Maryland's oversight authority and should not be pursued.

Respectfully submitted,

Michael S. Giaimo
API Northeast Region Director

[3] Final Regulation Order, Advanced Clean Trucks Regulation (2021) at https://ww2.arb.ca.gov/rulemaking/2019/advancedcleantrucks.

[4] *See:* Md. Code Ann., Env't § 2-1102, 1103, Md. Code Ann., Transp. § 23-206.4; Md. Code Regs. 26.11.34.01 et. seq.

Opposition of HB 230 - Department of the Environme
Uploaded by: Colby Ferguson
Position: UNF

Maryland Farm Bureau, Inc.

3358 Davidsonville Road • Davidsonville, MD 21035 • (410) 922-3426

February 8, 2023

To: House Environment & Transportation Committee

From: Maryland Farm Bureau, Inc.

Re: **Opposition of HB 230 - Department of the Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean Trucks Act of 2023)**

On behalf of our member families, I submit this written testimony opposing HB 230. This bill requires the state, by December 1, 2023, to enact the California Air Resources Board's vehicle standards which establishes the requirements for the sale of new zero-emission medium and heavy-duty vehicles in the State.

Since these standards do not include any requirements for implementing the needed charging infrastructure to meet this new demand, the industry will be at the mercy of truck stops and rest areas to offer charging options. Currently, there are no initiatives or programs being made available for the necessary charging infrastructure to be able to meet this sales mandate. Until proper charging infrastructure is in the pipeline to be built, the state should not move forward with these types of sales mandates. Medium and heavy-duty trucks require significantly more vehicle miles traveled than the typical light duty electric vehicle. Therefore, expecting the same implementation as the passenger vehicle is not realistic and shouldn't be required.

Agriculture is affected as farmers need to move their crops, livestock, poultry and ag products from the farm to the processing facilities. This requires travel on highways, which would make farm trucks meet the zero emission restrictions required under this proposed law.

MARYLAND FARM BUREAU RESPECTFULLY OPPOSES HB 230

Colby Ferguson
Director of Government Relations
For more information contact Colby Ferguson at (240) 578-0396

HB 230 Green Deal.pdf
Uploaded by: Dana Schulze
Position: UNF

HB 230

I am a USAF combat veteran, hold a BS in Public Affairs, MA in counseling.

Balanced Energy policies must provide Marylanders multiple, reliable, and affordable energy choices.

I oppose HB 230 it does not provide a balanced energy policy. California asked its residents not to charge their electric vehicles during certain hours. What would happen if all vehicles were electric? CA has had wildfires due to poorly maintained electric grid.

Maryland should separate itself from California's vehicle standards.

Intermittent forms of energy such as wind and solar are a greater threat to people due to the difficulty producing and transporting energy during extreme heat and cold causing more death than any recorded difficulties from fossil fuels. Other countries are producing more pollutants than the United States. We are one of the cleanest energy producers in the world.

The verbiage in HB 230 sounds like the sustainable development goals of Agenda 2030 when the government decides what fuel to produce and whom it will be distributed to in the community based upon a false climate crisis. The World Economic Forum created the climate crisis to control the populace and rule the world under a few select nations. The tactics of the WEF is to create a crisis and then provide a solution which controls the masses. Agenda 2030 and the Bali Declaration of G20, are examples of these strategies. Another example of the overreaching climate agenda is that bugs will be the choice of food for the masses since bugs positively impact the climate crisis. You will own nothing, eat bugs and be happy. See the links below.

Zero emissions is a term which is highly acclaimed for the populace while the "select few" freely fly the globe in their personal jets, fund the military industrial complex, incite global conflict, and promise that all lowly people will own nothing and be happy. Transportation and fuels decided by the government such as fossil fuels become regulated and extremely costly and will only be available for the extremely wealthy.

https://www.weforum.org/agenda/2022/02/how-insects-positively-impact-climate-change/

You'll own Nothing. And You'll be Happy (bitchute.com)

G20 Bali Leaders' Declaration | The White House

https://www.un.org/en/global-issues/food

Clean Trucks Act Letter of Opposition - FINAL.pdf
Uploaded by: Grayson Middleton
Position: UNF

Educate. Advocate. Innovate.

Date: February 6, 2023
To: Members of the House Committee on Environment and Transportation
From: Holly Porter, Executive Director
Re: HB 0230 – Clean Trucks Act of 2023 – **OPPOSE**

Delmarva Chicken Association (DCA) the 1,600-member trade association representing the meat-chicken growers, processing companies, and allied business members on the Eastern Shore of Maryland, the Eastern Shore of Virginia, and Delaware opposes HB 230 as written and urges an unfavorable committee report.

Heavy and medium-duty trucks are integral to every piece of the Delmarva chicken industry. From transporting seed to fields for planting, to taking the broilers to the processing plant, our industry simply cannot function without widespread, reliable means of heavy and medium-duty transport.

We look forward to a time when electric semi-trucks are a logistically sound and comparatively priced alternative to existing diesel vehicles, however that time is far off. Under the most ideal conditions and using the very latest technology, electric semi-trucks are only capable of traveling between 200-300 miles on one charge, compared with the 700-900 miles a conventional diesel truck can travel with one tank of fuel. This means a fully charged electric semi could not even cover some of our truck's daily journeys, to and from. Furthermore, it takes a matter of minutes to fill a diesel tank, compared with 8-12 hours it takes to fully charge an electric semi.

This presents an obvious animal welfare issue. If a truck carrying chicks or full-size broilers cannot make its destination in time, birds will suffer the elements and die in an inhumane manner. Current battery technology used in electric heavy-duty vehicles is not suited to the intemperate climate of the Delmarva peninsula, whose extreme hot and cold temperatures can easily drain a battery and make for an unreliable mode of transportation. Even if the current technology in a perfect setting could provide an entire day's journey, the weather alone could change that. This is simply unacceptable when transporting living animals. Furthermore, our trucks are most often traveling through rural, sparsely populated areas where even a gas station is a rarity. The complete lack of EV infrastructure in these areas alone is enough to warrant great concern for this legislation.

It is not enough to assume that the required technology and infrastructure will be ready, and then give an unreasonable and subjective deadline that our industry and the public must adhere to. If this body is truly interested in moving toward green heavy and medium-duty transportation, we must first seriously investigate the feasibility of this technology in all settings and circumstances. We must also address the lack of grid capacity (particularly in rural areas), and the widespread shortage of EV charging stations for heavy-duty trucks. Unfortunately, this legislation provides for none of those things.

Educate. Advocate. Innovate.

We urge an **unfavorable** vote on HB 0230.

Should you have any additional questions, please feel free to contact me at porter@dcachicken.com or 302-222-4069 or Grayson Middleton at middleton@dcahicken.com or 410-490-3329.

Sincerely,

Holly Porter
Executive Director

HB230 written.pdf
Uploaded by: Kirk McCauley
Position: UNF

WMDA/CAR Service Station and Automotive Repair Association

February 8, 2023

Chair: Kumar P. Barve

Members of Environment and Transportation Committee

RE:HB 230 Environment- Zero Emission Medium and Heavy-Duty vehicles

Position: Unfavorable

Putting a regulation in place when current infrastructure will not support EV deployment would only discourage purchases of EV vehicles. Charging locations will need to be built in areas that can support large vehicles with lots of fast chargers. Working trucks cannot wait in line to get charged.

- Cost is another factor that must be solved, the cost of land and installing chargers. Cost of EV truck as opposed to conventional diesel.
- Power grid that can support charging locations.

State vehicles, Trash haulers, local delivery trucks and over the road trucks all face the same problem – How far away can I travel from a charging outlet:

- In Cold temperatures- in warmer Temperatures
- Fully loaded or empty
- Where is a charger that will accept large vehicle

These issues should be solved before we put mandates in place that are doomed to fail.

Please give HB 230 an unfavorable Report

WMDA/CAR is a trade association that has represented service stations, convenience stores and independent repair shops since 1937. Any questions can be addressed to Kirk McCauley, 301-775-0221 or kmccauley@wmda.ne

Associated Builders and Contractors_UNF_HB0230

Uploaded by: Marcus Jackson

Position: UNF

Associated Builders and Contractors, Inc.

Maryland Joint Legislative Committee

The Voice of Merit Construction

Mike Henderson
President
Greater Baltimore Chapter
mhenderson@abcbaltimore.org

Chris Garvey
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(T) (301) 595-9711
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February 8, 2023

TO: ENVIRONMENTAL AND TRANSPORTATION COMMITTEE

FROM: ASSOCIATED BUILDERS AND CONTRACTORS

RE: H.B. 230 – ZERO – EMISSION MEDIUM – AND HEAVY-DUTY VEHICLES REGULATIONS (CLEAN TRUCKS ACT OF 2023)

POSITION: OPPOSE

Associated Builders and Contractors (ABC) opposes H.B. 230 which is before you today for consideration. This bill would require the Department of the Environment to adopt regulations on or before December 1, 2023, establishing requirements for the sale of new zero-emission medium- and heavy-duty vehicles in the State, defining a "heavy-duty vehicle" as one with a gross vehicle weight rating equal to or greater than 14,001 pounds.

The California Advance Clean Truck rule would have an adverse fiscal impact on our businesses that depend on medium and heavy-duty vehicles in their daily operations. Compared to conventional trucks, zero-emission trucks are generally more expensive to purchase. If passed by the legislature, it would be beneficial to our members to have a program that would incentivize companies to purchase zero-emission vehicles, when the time comes to phase out their older fleet of trucks.

Currently, there is little to no infrastructure set up to handle the transmission and distribution demands that are required by the California Advance Clean Truck rules. It is ABC's belief that a study should be conducted to fully understand the state's current grid capacity, the number of recharging stations that will be needed statewide, and the fiscal impact that it will have on small businesses that operate medium to heavy duty vehicles, particularly in the construction industry.

On behalf of the over 1,500 ABC business members in Maryland, we respectfully request an unfavorable report on H.B. 230, as written.

Marcus Jackson, Director
Government Affairs

HB0230_UNF_NWRA_MDE - Zero-Emission Medium- & Heav

Uploaded by: Pam Kasemeyer

Position: UNF

wasterecycling.org

Maryland-Delaware Solid Waste Association
a chapter of the
National Waste & Recycling Association℠
Collect. Recycle. Innovate.

TO: The Honorable Kumar P. Barve, Chair
Members, House Environment and Transportation Committee
The Honorable Malcolm Augustine

FROM: Pamela Metz Kasemeyer
J. Steven Wise
Danna L. Kauffman
Andrew G. Vetter
410-244-7000

DATE: February 9, 2023

RE: **OPPOSE UNLESS AMENDED** – House Bill 230 – *Department of the Environment – Zero-Emission Medium- and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)*

The Maryland Delaware Solid Waste Association (MDSWA), a chapter of the National Waste and Recycling Association, is a trade association representing the private solid waste industry in the State of Maryland. Its membership includes hauling and collection companies, processing and recycling facilities, transfer stations, and disposal facilities. MDSWA and its members **oppose** *House Bill 230: Department of the Environment – Zero-Emission Medium- and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)*, **unless the legislation is amended**.

Our member companies include waste and recycling haulers with large fleets of hauling vehicles. Especially given our role in promoting recycling and reducing waste, we are generally supportive of efforts to promote sustainability and reduce emissions within our industry. Our concerns with the bill, as drafted, are practical in nature – specifically the cost, availability, infrastructure, and suitability of electric hauling vehicles. First, the cost of electric waste hauling vehicles is significantly more than a traditional vehicle, imposing a significant burden on our member companies that could result in increased rates. Second, while some manufacturers have started to make electric vehicles, they are not yet widely available in the market, making compliance with a mandate a practical difficulty. Third, it is not yet clear whether electric waste hauling vehicles have the range to handle our typical collection routes, and the infrastructure for charging these vehicles is not fully developed and would be another source of substantial additional cost. MDSWA would support an amendment to require a needs assessment on key

issues of cost, infrastructure, and availability, and to delay implementation until certain criteria established by the needs assessment is satisfied. Adding such an amendment would make this proposal more practical to the waste and recycling hauler industry.

In summary, while the industry is fully supportive of reducing emissions and improving the efficiency of waste hauling vehicles, this legislation creates significant challenges for our members, making compliance an impracticality.

We request an unfavorable report, unless amended as described in this letter.

HB230 testimony.pdf
Uploaded by: Robert Phillips
Position: UNF

MARYLAND STATE FIREMEN'S ASSOCIATION

REPRESENTING THE VOLUNTEER FIRE, RESCUE, AND EMS PERSONNEL OF MARYLAND.

Robert P. Phillips
Chairman
Legislative Committee
17 State Circle
Annapolis, MD 21401
email: rfcchief48@gmail.com
cell: 443-205-5030
Office: 410-974-2222

HB 230: Department of the Environment – Zero–Emission Medium– and Heavy–Duty Vehicles – Regulations (Clean Trucks Act of 2023)

My name is Robert Phillips and I am the Legislative Committee Chairman for the Maryland State Firefighters Association (MSFA)

I wish to present testimony in opposition to **House Bill 230: Department of the Environment – Zero–Emission Medium– and Heavy–Duty Vehicles – Regulations (Clean Trucks Act of 2023)**

This bill could create an issue for the fire service. As of this time there is work being done to develop zero emission vehicles for the fire service but with only a few in service or still being tested we do not feel there is enough information at this time to develop proper guidelines. If the fire service were to be exempted until such time as there is sufficient equipment available then re-visit the inclusion of the fire service we could support this bill.

I thank the committee for their time and attention to this important bill and ask that you vote in opposition to House Bill 230.

I will now be glad to answer any questions, or my contact information is listed above.

HB0230-OPPOSE.pdf
Uploaded by: Sarah Reichert-Price
Position: UNF

Delegate Kumar P. Barve, Chair
and Members of The Environment and Transportation Committee
Maryland House of Delegates
Annapolis, MD

RE: HB0230 -Clean Trucks Act of 2023- OPPOSE

Dear Chair Barve and Members of the Committee,

I urge you and your colleagues to present with an UNFAVORABLE REPORT for HB0230. While I have no objections to cleaner air and a healthier environment, I feel that the push for electric vehicles is premature and requires further investigation and REASONABLE consideration. Inasmuch as there are numerous positive reasons for the use of electric vehicles, I feel the following reasons deserve equal consideration:

- The current configuration of the state's power grid cannot handle the energy required to recharge and sustain such a large number of electric vehicles simultaneously. HB0230 references California's Air Resources Board's Vehicle Standards. However, it is important to recall that California residents were requested NOT to charge their electric vehicles during certain hours and the state issued rolling blackouts in order to prevent an energy overload.
- In addition, CA has experienced wildfires contribute to poorly maintained power grid.
- Due to the sparse location of EV chargers and the extended time required to recharge EV's, drivers must consider this when planning/scheduling a delivery route. This strains the already stressful traffic schedule/driving conditions per delivery.
- EV's are much heavier than gas powered vehicles, which makes travel in mountainous areas (Western MD) more difficult, causing more strain on the battery and other mechanical components.

It is for the aforementioned reasons that I urge an UNFAVORABLE Report for HB0232.

Thank you for your time and attention to this matter.

Sarah Price (ACRWC)
Westernport, MD

HB 230 – Zero Emissions Medium and Heavy Duty Veh
Uploaded by: Tom Ballentine
Position: UNF

NAIOP
MARYLAND CHAPTERS
THE ASSOCIATION FOR COMMERCIAL REAL ESTATE

February 6, 2023

The Honorable Kumar P. Barve, Chair
House Environment and Transportation Committee
House Office Building, Room 251
6 Bladen St., Annapolis, MD 21401

Oppose: HB 230 – Zero-Emissions Medium and Heavy-Duty Vehicles – California Regulations

Dear, Chair Barve and Committee Members:

The NAIOP Maryland Chapters represent more than 700 companies involved in all aspects of commercial, industrial, and mixed-use real estate. Our membership includes some of the largest operators of warehouses, distribution centers and light industrial buildings in the state. These facilities serve as essential supply chain links in the flow of products to and from our region. NAIOP is concerned that adoption of the California zero emissions standards for medium and heavy-duty vehicles in Maryland is premature and recommends the state continue to progress through the Multi-State Zero Emission Medium and Heavy-Duty Vehicle Memorandum of Understanding signed by Maryland in July of 2020.

The zero-emission vehicle (ZEV) landscape in California is far more advanced than Maryland.
California level Incentives and policy support have not been put in place to prepare for the transition to medium and heavy-duty ZEVs. Funding for charging stations and make-ready electrical infrastructure has been in place and is expanding. For example, over the next four years California has budgeted $1.7 billion for medium and heavy-duty ZEV infrastructure – which includes funding for both hydrogen refueling and EV charging. While the federal Infrastructure Investment and Jobs Act provides significant funding to build out a national charging network, the majority of these funds are dedicated to providing charging infrastructure for personal vehicles. Maryland will have to fill the gap with significant funding for electric power upgrades and charging infrastructure to support a heavy-duty ZEV requirement. Maryland also lags in other areas of policy support. For example, the details of siting hundreds of thousands of pieces of infrastructure on private property and in public right of ways can slow review and approval by local governments and utilities. In 2015 California legislated streamlining the permitting of ZEV infrastructure. Eight years later implementation is still in progress.

Electricity supply and demand charges must be addressed.
Electrifying medium and heavy-duty vehicles will require solutions beyond simply scaling up the model used for electric cars and light duty trucks. Charging infrastructure for medium and heavy-duty vehicles requires addressing electric capacity and high demand charges applied to the peak electric loads of commercial utility customers.

Charging one heavy-duty vehicle can use as much power as simultaneously fast-charging 10-20 light-duty vehicles. Warehouses and distribution centers have some of the lowest power requirements per square foot of any building type. Electrification of heavy-duty vehicles will often require bringing far more power to the site than is necessary to run the building. Warehouse and distribution center locations are based on zoning, site conditions, supply chain and logistics needs. Access to high levels of electric power are not necessarily significant factors in siting.

Commercial electricity rates are not conducive to the high-power charging required for heavy-duty vehicle charging. In addition to charges for the energy commodity, commercial utility customers are also assessed demand charges for the maximum power used during a billing cycle. Demand charges are designed to discourage excessive electricity use. Demand charged associated with EV charging can be significantly higher than the energy commodity price. Rate reform is needed to reconcile the mismatch between rate structure and EV charging needs.

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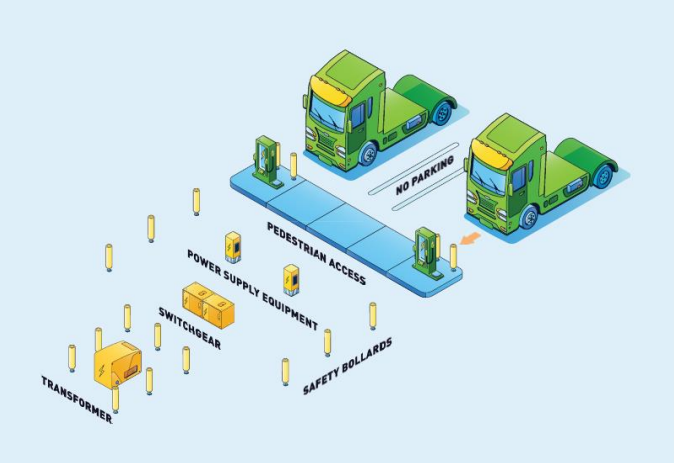
Charging of heavy-duty vehicles needs time to be standardized and battery technologies improved.
Reports from the California Energy Commission, The Port of Long Beach and the Northeast States for Coordinated Air Use Management warn that a common charging standard for trucks is needed to avoid stranded assets and minimize the need for future modifications to charging connectors. Manufacturers are working on advances to battery chemistry for heavy-duty trucks that could improve charge times but increase power demands. Early adopters anticipate that expanded electricity supplies and upgraded charging infrastructure will be needed to accommodate changing technologies as electric truck charging technology evolves.

Space requirements and logistics challenges.
Space requirements for equipment and parking of tractor trailers may dictate where and how much charging can take place on any given site. Studies have concluded that 700 square feet per charger and 5,000 square feet for electrical power supply equipment may be necessary. This will require reconfiguring or expanding some sites. The State Highway Administration has warned that the additional weight of electric tractor trailers could exceed limits for some roads and bridges. Weight could also be an issue for paving on warehouse truck courts and access roads.



Gap analysis and resource planning is needed.
Work needs to be done to reconcile, coordinate, prioritize and appropriately sequence the electrification of light and heavy-duty vehicles and the simultaneous electrification of building heat and hot water systems. House Bill 230 would add significant challenges to existing requirements that buildings and light-duty vehicles be electrified. In a letter to the Maryland Department of Environment, the Alliance for Automotive Innovation reported that by 2035 Maryland will need 282,762 charging stations to accommodate light-duty vehicle charging. The number of non-proprietary level two public charging outlets in Maryland is currently 2,557. The state has zero hydrogen fueling stations. Providing that many charging stations would require installation of charging stations at an average rate of 1,900 per month over the next 12 years. Adopting California's heavy-duty ZEV requirements would represent a substantial increase in deliverables and the level of incentives and policy support needed from state government.

Continue working with the Multi-State MOU.
Before adopting a heavy-duty ZEV sales requirement, Maryland needs to accurately acknowledge and make the public investments and adopt the supportive policies necessary to address the barriers to the deployment of medium and heavy-duty ZEV's. Maryland should continue laying the foundation for this transition by expanding access to biofuels and continuing to work through the multi-state MOU on medium and heavy-duty ZEVs. Reference has been made to Connecticut's law. It is important to note that the Connecticut law authorizes but does not require adoption of the California regulations for medium and heavy-duty trucks.

<u>For these reasons, NAIOP respectfully recommends your unfavorable report on House Bill 230.</u>

Sincerely.

Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters -*The Association for Commercial Real Estate*

cc: House Environment and Transportation Committee Members
Nick Manis – Manis, Canning Assoc.

HB0230 - SHA - Zero Emissions Medium and Heavy - L

Uploaded by: Patricia Westervelt

Position: INFO

MARYLAND DEPARTMENT OF TRANSPORTATION

Wes Moore
Governor

Aruna Miller
Lieutenant Governor

Paul J. Wiedefeld
Acting Secretary

February 8, 2023

The Honorable Kumar P. Barve
Chair, House Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

RE: Letter of Information – House Bill 230 – Department of Environment – Zero Emission Medium and Heavy-Duty Vehicles – Regulations (Clean Trucks Act of 2023)

Dear Chair Barve and Committee Members:

The Maryland Department of Transportation (MDOT) takes no position on House Bill 230 but offers the following information for the Committee's consideration.

House Bill 230 requires the Maryland Department of Environment to adopt regulations that establish requirements for the sale of zero-emission medium and heavy-duty vehicles in the State of Maryland.

The MDOT State Highway Administration's (SHA) Statewide fleet currently includes 1,515 medium and heavy-duty vehicles. These vehicles operate across the State, utilized by the seven SHA districts to perform various maintenance and emergency response services. This includes, but is not limited to, snow removal, litter clean up, and Coordinated Highways Action Response Team (CHART) emergency roadside response, which encompasses temporary traffic control, relocation of disabled vehicles, and general support for stranded motorists on roadways. The SHA is actively pursuing methods to lower the carbon footprint and support Maryland's goals for reducing Statewide greenhouse gas emissions. The SHA is reviewing creative methods to fund equipment purchases through the Carbon Reduction Program in the Infrastructure Investment and Jobs Act (IIJA), which may allow for diesel engines to be retrofitted with diesel emission reduction technology.

Currently, there is insufficient electrical capacity to support an entirely zero-emission medium and heavy-duty fleet at SHA. Large scale charging stations will need to be installed at all SHA maintenance shop facilities. There are additional concerns about the capability of electric heavy-duty equipment and performance during long-lasting extreme weather events or other emergency on-call operations. Converting SHA's medium and heavy-duty fleet to fully electric would require an increased number of vehicles or additional contractor resources to maintain the current level of service. This conversion would also require a form of training for current fleet mechanics or the creation of new mechanic positions that specialize in the repair and installation of parts required by a fully electric fleet.

The SHA anticipates a significant fiscal impact from House Bill 230. Our preliminary estimate indicates that it could cost approximately $950 million to replace the existing fleet with electric medium and heavy-duty vehicles. This estimate does not include the cost of acquiring and installing adequate charging infrastructure across the State, the need to invest in additional vehicle units to meet the operational demand, or the cost of training and recruiting qualified mechanics to maintain the fleet. These additional requirements would increase the fiscal impact to well over $1 billion.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberating House Bill 230.

Respectfully submitted,

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