



Chelsea Priest

Department of Environmental Management
RI DEM - Office of Air Resources
235 Promenade Street
Providence, RI 02908

September 8th, 2023

RE: Rhode Island's Low-Emission Vehicle Program Rule 250-RICR-120-05-37

Dear Ms. Priest,

Thank you for the opportunity to submit comments regarding Rhode Island's Low-Emission Vehicle Program Rule 250-RICR-120-05-37. We, the undersigned climate, clean energy, and transportation groups write to you today to express our strong support for Rhode Island's adoption of the Advanced Clean Cars II (ACCII), Advanced Clean Trucks (ACT) Rule, the Low NOx Heavy-Duty Omnibus (HDO) Rule, and the Phase 2 Greenhouse Gas Rule.

The Act on Climate requires Rhode Island to reduce its greenhouse gas (GHG) emissions 45% below 1990 levels by 2030; 80% by 2040; and achieve net-zero emissions by 2050. However, the Rhode Island Executive Climate Change Coordinating Councils (RIEC4) 2022 plan to meet the Act on Climate shows that the state is not on track to meet this mandate. The modeling only projects Rhode Island will meet 40% emissions reductions by 2030, and that's only if everything in the current Greenhouse Gas (GHG) reduction plan is implemented.

Adoption of the ACCII and ACT regulations, a priority action in the EC4's 2022 climate plan, is critical in order for Rhode Island to meet the Act on Climate. These policies will function as a gradual but guaranteed way to increase the percentage of electric vehicles on Rhode Island's

roads. Without them, there is no clear path for the emission reductions needed in the transportation sector to meet the 2030 mandate or subsequent requirements for 2040 and 2050. ACCII and ACT will increase consumer choice, deliver significant public health benefits to the Ocean State, and bring Rhode Island on-par with several other states that have already adopted or are in the process of adopting these key standards – California, Colorado, Connecticut, Delaware, Massachusetts, Maryland, New Jersey, New York, Oregon, Vermont, Virginia, and Washington.¹ Europe is also phasing out petroleum-fueled vehicles by 2035.

Advanced Clean Cars II (ACCII)

ACCII requires **automakers** to steadily increase the percentage of vehicles they sell that are zero emission from 35% in model year 2026 to reach 100% in model year 2035, per the trajectory illustrated in this graph from the California Air Resources Board.² At the same time, ACCII requires smog-forming emissions from new gas-powered cars to decrease. Rhode Island must adopt ACCII this year for three reasons:

1. **Reduce greenhouse gas emissions as required by the *Act on Climate*.**

Transportation is the largest source of GHG emissions in the state. Rhode Island’s Executive Climate Change Coordinating Council (RIEC4)’s 2022 Update to the GHG Reduction Plan estimated that the state will need roughly 86,000 registered electric vehicles (EVs) on the road by 2030. Currently, there are fewer than 7,000 EVs registered in the state. The only state policy currently advancing vehicle electrification in Rhode Island is the DRIVE EV rebate program, which does not have a concrete long-term funding source. ACCII would steadily increase the supply of EVs in the state; without it, Rhode Island will not be able to reach 86,000 EVs by 2030 or 45% GHG reductions. By requiring automakers to steadily and gradually increase their sales of new EVs, the ACCII program is a valuable tool that Rhode Island can implement to get back on track to reach its climate goals.

2. **Increase consumer choice and support in-state business.**

Auto manufacturers are producing EVs for sale on the global market and send supply to those areas with the most supportive policies. That’s why, for example, there are many EV models available for sale in Europe that aren’t available in the United States, or why within the US there are more options in California than Rhode Island. Adopting ACCII will put Rhode Island on

¹ Rhode Island Department of Environmental Management. “Advanced Clean Cars II & Advanced Clean Trucks Public Listening Session.” State of Rhode Island, 18 May 2023.

² California Air Resources Board. “Advanced Clean Cars II | California Air Resources Board.”

the map and force automakers to send EV models to the Ocean State, benefiting *dealerships* and *consumers* by making sure the full range of choices is available to Rhode Islanders. Adopting the ACCII rule in Rhode Island will ensure that our residents can access the zero emission vehicles they want within our state. If Rhode Island does not adopt the ACCII rule, we could lose out on the clean energy economy emerging in other states and the associated economic benefits.

Further, increased EV adoption will economically benefit all Rhode Island residents, regardless of whether they are EV owners because EVs drive electricity costs down for all ratepayers. EVs present a significant opportunity to reduce electricity costs for all customers by spreading utility fixed costs over a greater quantity of kilowatt-hour sales, particularly if the additional load occurs during off-peak times.³

3. Protect public health.

The transportation sector is a major source of air pollution and disproportionately contributes to nitrogen oxide (NOx), carbon dioxide (CO₂), and particulate matter (PM_{2.5}). These pollutants harm public health, especially in low-income communities and communities of color. The American Lung Association estimates that the cumulative health benefits of electrifying transportation will amount to nearly \$3.2 billion by 2050 in Rhode Island alone.⁴ Additionally, by requiring 100% zero emission vehicles by 2035, Rhode Island can avoid 288 premature deaths, 5,430 asthma attacks, and 29,400 lost workdays. By adopting ACCII, Rhode Island can reduce total NOx emissions by 1,134 U.S. tons by 2040 and PM_{2.5} emissions by 78 U.S. tons by 2040.⁵ The ACCII rule is one of Rhode Island's best available tools for delivering these much-needed public health benefits.

[Advanced Clean Trucks \(ACT\) & Heavy Duty Omnibus Low NOx \(HDO\) Rules](#)

³ https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf

⁴ <https://www.lung.org/getmedia/9e9947ea-d4a6-476c-9c78-ccc7d49ffe2/ala-driving-to-clean-air-report.pdf>

⁵ <https://theicct.org/wp-content/uploads/2023/05/ri-acc-ii-benefits-fs-may23.pdf>

ACT will require that manufacturers sell an increasing number of zero-emission medium- and heavy-duty vehicles (MHDVs), vehicles greater than 8,500 pounds, from 2024 to 2035.⁶ The sales target varies according to the size of the vehicle. If adopted this year, the ACT rule will gradually increase the percentage of zero-emission medium- and heavy-duty vehicle sales to 30 to 50 percent zero-emission by 2030 and 40 to 75 percent by 2035, depending on the size of the vehicle. Zero-emission medium, and heavy-duty vehicles do not release tailpipe pollution, and will result in cleaner, healthier air, and reduced greenhouse gas emissions. Secondly, HDO will require emissions reductions from new diesel-powered MHDVs still sold during this time period. While the ACT rule works year-over-year to gradually increase the supply of zero-emission trucks and buses, diesel trucks and buses will continue to be sold in Rhode Island. The new standards proposed within the HDO regulation will cut truck emissions, including during low load conditions. Together, the ACT and HDO regulations will help to reduce adverse health impacts and improve air quality throughout the state, especially in those dense transportation corridors that are disproportionately impacted by truck emissions. Rhode Island must adopt the ACT and HDO rules for three reasons:

1. **Decrease greenhouse gas emissions.**

MHDVs make up 6% of the vehicles on the road in Rhode Island but contribute 24% of the transportation sector's greenhouse gas emissions.⁷ Every new fossil-fuel powered vehicle sold locks the state into years of further climate-warming emissions. According to a recent analysis by ICCT, Rhode Island has the potential to achieve significant reductions in NOx (9,250 tons), PM 2.5 (76 tons), and carbon dioxide (CO2) (8.88 MMT) emissions between 2020 and 2050 by implementing the ACT measures.⁸ The ACT and HDO rules are Rhode Island's best available tools for delivering these climate benefits.

2. **Protect public health.**

MHDVs have a disproportionate impact on public health: despite making up only 6% of the vehicles on the road in Rhode Island, they are responsible for 50% of nitrogen emissions and 44% of particulate matter (PM2.5) emissions⁹ within the transportation sector. These pollutants

⁶ Massachusetts Sierra Club, et al. "Advanced Clean Truck (ACT) Rule: The Road to Electrifying Trucks in Massachusetts." *Google Docs*, 7 Dec. 2021, drive.google.com/file/d/1HL5a6B1nLJCd8fE2vCo9FdUyTBEDz0fm/view.

⁷ Union of Concerned Scientists. "What the Advanced Clean Truck Rule Will Do for Rhode Island." Union of Concerned Scientists, Mar. 2023.

⁸ <https://theicct.org/wp-content/uploads/2022/09/HDV-fact-sheet-RI-092122.pdf>

⁹ (see Footnote 5)

are detrimental to human health and have been specifically linked to heart attacks, lung cancer, and the exacerbation of asthma. The Union of Concerned Scientists estimates that electric trucks come with a 83-91 percent reduction in global warming emissions and a 45-76 percent reduction in mortality, across duty cycles ranging from delivery vans to long haul tractors.¹⁰ The American Lung Association found that by adopting ACT, Rhode Island can see \$2.3 billion in cumulative health benefits from 2020-2050, avoid 208 premature deaths, 4,378 asthma attacks, and 23,430 lost workdays.¹¹ Adopting regulatory programs like ACT was noted as “one of the most effective tools available” to accelerate zero-emission health benefits in the Multi-State Medium- and Heavy-Duty Action Plan issued by the Northeast States Coordinated Air Use Management (NESCAUM) in July 2022.¹²

The Low NOx Heavy-Duty Omnibus Rule will significantly reduce nitrogen oxide (NOx) emissions and therefore improve public health. Nitrogen oxide is a precursor to smog, which can cause or exacerbate numerous respiratory ailments and premature death. All combustion engines produce NOx, especially mobile sources such as trucks. Communities adjacent to railyards, ports, and warehouses experience heavy truck traffic, with trucks often idling and driving slowly, with frequent stops. Today's heavy-duty trucks do not control NOx emissions effectively during such low load conditions. The new standards proposed within the Low NOx Heavy-Duty Omnibus Regulation will cut truck emissions, including during low load conditions. While recently adopted federal standards for diesel engines will provide some of these emission and health benefits, Rhode Island's adoption of ACT and HDO will ensure that the state benefits from both a transition to zero emission trucks and cleaner combustion engines. Thus, the regulation will help to reduce adverse health impacts and improve air quality throughout the state, especially in those areas that are disproportionately impacted by truck emissions.

3. Support in-state business and attract investments.

Zero-emission trucks and buses are increasingly cost competitive with fossil fuel alternatives due to substantial fuel and maintenance cost savings, which is why major companies, employers, and investors support the ACT rule.¹³ According to a study done by Roush Industries, some trucks and buses may be on par with diesel vehicles on an upfront cost basis as soon as 2027.¹⁴ Moreover, the rules can stimulate the creation of high-quality zero-emission manufacturing and charging installation jobs in our state. Additionally, the Union of Concerned Scientists finds that adopting ACT will deliver around \$110 million in annual net societal benefits and in annual savings to commercial fleets by 2050.¹⁵ Rhode Island must adopt these

¹⁰ (see Footnote 5)

¹¹ <https://www.lung.org/getmedia/e1ff935b-a935-4f49-91e5-151f1e643124/zero-emission-truck-report>

¹² <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf>

¹³ [https://www.ceres.org/sites/default/files/Multi-state%20ACT%20Support%20Letter%20\(6.22\).pdf](https://www.ceres.org/sites/default/files/Multi-state%20ACT%20Support%20Letter%20(6.22).pdf)

¹⁴ <https://www.edf.org/media/new-study-finds-rapidly-declining-costs-zero-emitting-freight-trucks-and-buses>

¹⁵ (see Footnote 5)

rules to avoid missing the associated economic benefits from the emerging clean energy economy.

Include Large Entity Reporting Requirements

We encourage RIDEM to include the large entity reporting requirements within the regulations and lower the fleet size threshold to 5 vehicles to capture accurate fleet specific data. This requirement compliments the ACT Rule and should include provisions to capture accurate data on the number of trucks on our roads, where they travel in the state, and the kinds of emissions they produce. This information is crucial for the development of other programs such as charging infrastructure, and a more tailored approach towards accelerating the MHDV market. It will also contribute to a better understanding of diesel particulate pollution. Therefore, we encourage RIDEM **not** to skip over this reporting requirement.

Ensuring a lower fleet size threshold would make sure that smaller fleets are included in the resulting data, which comprise a bulk of the medium- and heavy-duty vehicles on Rhode Island roads. Oregon¹⁶ and Washington¹⁷ have both adopted lower thresholds of 5 or more vehicles for the reporting requirement. Additionally, it will provide vital data on small fleet owners who are less likely to have the resources to meet the higher upfront costs of zero-emission vehicles and will help inform the design of targeted programs.

Phase 2 Greenhouse Gas Rule

The Phase 2 Greenhouse Gas Rule promotes a new generation of cleaner, more fuel-efficient trucks by encouraging the development and deployment of new and advanced cost-effective technologies.

The ACC II, ACT, HDO and Phase 2 GHG Standards are Feasible in Rhode Island

Incentives

Although the price of electric vehicles is becoming increasingly competitive with gas powered cars, there are also incentives available to ensure EVs are affordable for all Rhode Islanders. Rhode Island's DRIVE EV program will resume on September 18th, where residents can receive a \$2,000 rebate for purchasing a fuel cell electric vehicle or battery electric vehicle, and a \$1,500 rebate for plug-in hybrid electric vehicles.¹⁸ There is an additional \$1,500 DRIVE + rebate available for low-income individuals.

There are also federal incentives available through the Inflation Reduction Act (IRA). Rhode Islanders may qualify for a tax credit of up to \$7,500 if they buy a new, qualified plug-in EV or

¹⁶ <https://www.oregon.gov/deq/aq/programs/pages/mdhdreporting.aspx>

¹⁷ <https://ecology.wa.gov/getattachment/f3e6d16b-e1c6-4861-b007-c0b95cbdbd3f/OTS-4007-5-For-Filing.pdf>

¹⁸ Office of Energy Resources. "DRIVE EV." *Drive.ri.gov*, 2023, drive.ri.gov/. Accessed 21 Aug. 2023.

fuel cell electric vehicle. Qualifications include battery capacity, vehicle weight, purchase from a qualified manufacturer, and final assembly in North America.¹⁹ The IRA also created a federal tax credit for *used* electric vehicles of up to \$4,000.

Additionally, electric vehicle owners see significant cost savings over the lifetime of their vehicles due to lower fuel and maintenance costs.

Charging Infrastructure

As of February 2023, there are 288 public charging locations across Rhode Island. The National Renewable Energy Laboratory (NREL) recommends that states have 40 Level 2 plugs per 1,000 EVs and 3.4 DCFC plugs per 1,000 EVs. Rhode Island currently has 84.2 Level 2 plugs per 1,000 EVs and 10.1 DCFC plugs per 1,000 EVs.²⁰

While Rhode Island has adequate charging infrastructure to support the amount of EVs in the state currently, it will need to significantly expand this infrastructure to support the widespread adoption of electric vehicles. However, this should not delay the adoption of ACCII. In fact, by committing to these standards, Rhode Island would send a powerful message to the market and spur development in the state's charging network. By the time the majority of the population purchases an EV, the infrastructure will be very well established. It takes time for both adoptions to phase in and the infrastructure to be built, we must do both at the same time if we want to tackle air pollution and meet the Act on Climate.

In addition to sending this signal to the market, the federal government is also incentivizing the development of charging infrastructure. RI received around \$23 million in National Electric Vehicle Infrastructure (NEVI) program funding to build DC fast charging stations along the I-95 corridor and later, Route 146. RIDOT's plan for NEVI actually assumes RI has adopted ACCII.²¹

While public charging is crucial to this transition, electric vehicles are often charged at home. With the ACCII regulation, charging a car at home can be as easy as plugging in the convenience cord that comes with an electric vehicle into a basic 120V outlet. ACCII cars will be required to come with a convenience cord that can charge at level 1 and 2.

Additionally, Rhode Island Energy's (RIE) EV programming must be a key piece of supporting ACCII and Rhode Island's approach to meeting the emissions reduction mandate of the Act on

¹⁹ U.S. Department of Energy. "Alternative Fuels Data Center: Qualified Plug-in Electric Vehicle (PEV) Tax Credit." *Afdc.energy.gov*, 22 Aug. 2022, afdc.energy.gov/laws/409.

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²⁰ U.S. Department of Energy. "Alternative Fuels Data Center: Electric Vehicle Charging Infrastructure Trends." *Afdc.energy.gov*, U.S. Department of Energy,

²¹ Rhode Island Department of Transportation. "EV Charging Stations - Rhode Island Rhode Island Department of Transportation." [Wwww.dot.ri.gov](https://www.dot.ri.gov), RIDOT, www.dot.ri.gov/projects/EVCharging/.

Climate. RIE plans to file an EV program with the Public Utilities Commission this fall that includes make ready, off-peak charging rebates, and programs for pile-mounted chargers. While we support and very much need these programs, Green Energy Consumer's Alliance's memo²² outlines what they must include to adequately support EVs and reduce emissions.

Encouraging a Circular Economy

While battery recycling is a concern with electric vehicles, battery recycling supply chains are continuously improving. The battery mineral requirements in the federal Clean Vehicle Credit, for example, incentivize the recycling of battery components within the US and their re-use in new vehicles. ACCII would actually *better* this situation by requiring manufacturers to label their batteries, so recycling is made easier!

Together, Advanced Clean Cars II, Advanced Clean Trucks, the Low NOx Heavy-Duty Omnibus Rule, and the Phase 2 Greenhouse Gas Rule will help Rhode Island meet the Act on Climate and create a healthier environment. For all these reasons, we strongly support the adoption of the ACCII, ACT, HDO, and Phase 2 Greenhouse Gas Rule. Please adopt these rules before the end of 2023 to clean up our local air, improve public health, bolster our economy and reduce climate-harming greenhouse gas emissions. With each year that Rhode Island delays adopting ACCII, ACT, HDO, and Phase 2 Greenhouse Gas Rule, the state misses another model year of the program and the subsequent public health, environmental, and economic benefits. We respectfully urge the Department of Environment management to adopt the regulations in full by the end of the year.

Sincerely,

Amanda Barker, Green Energy Consumers Alliance
Sarah Krame, Sierra Club
Emily Koo, Acadia Center
Chelsea Hodgkins, Public Citizen
Andrea Colomina, Green Latinos
Kathy Harris, Natural Resources Defense Council
Jeff Migneault, Climate Action Rhode Island
Kevin Shen, Union of Concerned Scientists
John Flaherty, Grow Smart RI
Barbara Sullivan-Watts, Rhode Island Citizens' Climate Lobby
Peter Trafton, Environment Council of Rhode Island

²² <https://260434.fs1.hubspotusercontent-na1.net/hubfs/260434/Memo%20on%20Whats%20Needed%20in%20RIE%20Fall%202023%20EV%20Filing.pdf>

