



November 17, 2021

Via e-mail

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Re: Comments in support of New York State Department of Environmental Conservation’s Proposed Medium- and Heavy-Duty Zero Emission Truck Annual Sales Requirements and Large Entity Reporting, I.D. No. ENV-36-21-00004-P

INTRODUCTION

The undersigned, which include environmental groups, health professionals, labor organizations, transportation and environmental justice advocates, appreciate the opportunity to comment on the Advanced Clean Truck (“ACT”) rule proposal and thank staff for their

considerable time and effort spent on the rulemaking.¹ The ACT rule is technically feasible and cost-effective today, and critical for protecting public health, addressing climate change, and developing New York’s clean energy economy. Further, adoption of the ACT rule is a crucial policy to achieve the state’s climate goals, codified in the Climate Leadership and Community Protection Act (“CLCPA”), and was a recommendation from the Transportation Advisory Panel to the Climate Action Council as a way to reduce emissions from the transportation sector. The Climate Action Council has repeatedly used the word “transformative” to describe the policies that will need to be implemented to meet CLCPA mandates, and the ACT rule is just that—a transformative policy that will jumpstart the transition to zero-emission medium- and heavy-duty vehicles (“MHDVs”) in the state.

It is imperative that New York adopt this rule before the end of 2021. Delaying adoption will delay benefits, compromising the health of New Yorkers, setting back climate action, and, with the mandatory lead time requirement for manufacturers, delay deployment of a proven, valuable technology. To ensure New York adopts the strongest rule possible, we urge the Department of Environmental Conservation (“DEC”) to include the following recommendations in the final rule:

- Limit early crediting to one year; and
- Set the fleet reporting threshold at five vehicles or more and make the data publicly available at the most granular level possible.

In addition to those improvements within the rules, we suggest DEC move forward with adoption of the Heavy-Duty Omnibus (“HDO”) rule expeditiously to ensure all new fossil fuel trucks that continue to be sold in New York are as clean as possible.

DEC’s work on this vital rule helps demonstrate New York’s commitment to a cleaner, more equitable future. Adopting the ACT rule will accelerate the transition to zero-emission MHDVs and, in the process, deliver immense benefits to New York, including cleaner air and fewer greenhouse gas emissions, while spurring economic activity.

I. ADDRESSING MHDV EMISSIONS REMAINS A CLIMATE AND PUBLIC HEALTH IMPERATIVE FOR NEW YORK STATE.

Emissions from the transportation sector generally—and from MHDVs in particular—are a major source of climate-altering greenhouse gas (“GHG”) emissions and contribute significantly to the overall health burden posed by fossil fuel combustion. Air pollution is a major public health threat in New York State and across the globe. Air quality in New York State remains poor, with large portions of the state in chronic nonattainment of federal air quality standards for ozone. Recently revised guidelines issued by the World Health Organization also suggest that most New Yorkers are exposed to harmful levels of particulate matter on a daily

¹ Many of the same groups submitted comments to the Department of Environmental Conservation in the spring of 2021 encouraging DEC to move forward with this rulemaking. *See* Comments by Earthjustice et al., to N.Y.S. Dep’t of Env’tl Conservation, *Updated Comments to DEC in Support of Adopting California’s Truck Emission Standards* (Apr. 1, 2021), [attached as Attachment 1].

basis.² Exposure to these and other pollutants contribute to significant adverse health outcomes, including asthma, which remains an epidemic in New York State, along with a range of respiratory and cardiovascular conditions, and can even lead to premature deaths.

Emissions from trucks and buses, which are still almost entirely powered by diesel and other fossil fuels, contribute an outsize share of these and other toxic air pollutants and drive disparities in exposures to toxic air pollution as experienced by communities of color. Diesel exhaust is particularly harmful, as it has been identified as a carcinogen. A large majority of trucks on the road today still burn diesel, and emissions from these trucks contribute to New York State being the most diesel polluted state in the country.³

In New York State, transportation accounts for 36% of statewide GHG emissions, more than any other end-use sector.⁴ While emissions from the electric sector have been on a consistent downward trajectory—total GHG emissions from electricity generation are less than half what they were in 1990—emissions from transportation are trending upwards.⁵ Total transportation sector GHG emissions have increased by 25% since 1990, “by far” the greatest increase of all in-state energy-related emissions sources.⁶ In fact, the transportation sector represents the only major fuel combustion sector that has seen an increase in total GHG emissions over the last three decades. And within this sector, MHDVs are responsible for much of the rising emissions impact. In New York State, diesel emissions account for 21% of statewide GHG emissions, using the CLCPA’s emission accounting methodology—despite accounting for just 4% of registered vehicles.⁷

Forecasts project sizable increases in truck volumes in the coming decades, underscoring the urgent need for immediate and transformative policies to move towards zero-emission MHDVs. The latest data show that the total vehicle miles traveled (“VMT”) from diesel-powered heavy-duty vehicles nearly doubled from 1990 to 2007, with most of that increase seen in the period since 2002.⁸ Through 2050, freight trucks’ total VMT is projected to increase by 54%, which would result in a net increase in total emissions even assuming improvements in fuel efficiency.⁹ In New York, trucks already account for 88% of all freight movement and truck tonnage is projected to increase 50% over the next two decades.¹⁰ This will require more trucks

² Press Release, World Health Org., *New WHO Global Air Quality Guidelines Aim to Save Millions of Lives from Air Pollution* (Sept. 22, 2021), <https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution>.

³ Based on an analysis of EPA’s 2014 National Air Toxics Assessment results for diesel. See *2014 NATA: Assessment Results*, U.S. Env’tl Prot. Agency, <https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results> (last updated July 23, 2021).

⁴ N.Y. Energy Rsch. & Dev. Agency, *New York State Greenhouse Gas Inventory: 1990-2016* at S-12 (2019).

⁵ See *id.* at 7 tbl. 2, 19 tbl. 11.

⁶ *Id.* at S-10, 19 tbl. 11.

⁷ N.Y. Dep’t of Env’tl Conservation, *Regulatory Impact Statement Summary 6 NYCRR Part 218, Emissions Standards for Motor Vehicles and Motor Vehicle Engines 2* (2021) (“RIS Summary”), https://www.dec.ny.gov/docs/air_pdf/proposed218.pdf; N.Y.S. Dep’t of Motor Vehicles, *Vehicle, Snowmobile, and Boat Registrations* [spreadsheet] (Nov. 1, 2021), <https://data.ny.gov/Transportation/Vehicle-Snowmobile-and-Boat-Registrations/w4pv-hbkt>.

⁸ *Id.* at 17 tbl. 10.

⁹ *Id.* at 3.

¹⁰ N.Y. Dep’t of Transp., *New York State Freight Transportation Plan, Technical Memorandum 5* at 28 tbl. 6-1 (2017), https://www.dot.ny.gov/content/delivery/Main-Projects/projects/P11618881-Home/P11618881-repository/Tech%20Memo%205_FINAL.pdf.

and more truck VMT, with recent modeling suggesting that the total population of MHDVs in New York State will increase by over 40% between 2020 and 2050.¹¹

Emissions from MHDVs are also significant contributors to regional and local air quality problems. Motor vehicles directly emit dozens of harmful pollutants, including carbon monoxide, black carbon, nitrogen oxides (“NOx”), fine and coarse particulate matter, as well as a range of toxic air substances like benzene and formaldehyde. Emissions from MHDVs account for 24% of all GHGs from the on-road vehicle fleet and are also responsible for 52% of the NOx, and 45% of the fine particulate matter (“PM2.5”) emitted by on-road vehicles.¹² These emissions also lead to the formation of “secondary” pollutants, like ozone, that are not directly emitted but form afterwards through reactions in the atmosphere. Each of these pollutants can cause adverse human health and environmental impacts. Adoption of the ACT will help to reduce this health harming pollution—DEC estimates health benefits to New York of \$3.3 billion for 2025–2040, based on applied ratios of these metrics to California’s benefits and estimates.¹³

Electrification of MHDVs would eliminate tailpipe emissions and is thus a critical air quality and public health intervention. Nine counties in New York State, home to over 12 million New Yorkers, are currently in nonattainment of the federal air quality standard for ground-level ozone, or smog. Even as a mounting body of evidence points to health effects at lower levels (prompting EPA to consider an even more stringent standard in order to protect public health), the New York Metro Area remains in nonattainment of the now outdated ozone standard set in 2008, let alone the most recent standard set in 2015. Emissions from MHDVs have been pinpointed as “a major and growing contributor” of persistent ozone exceedances in the region. In fact, the Ozone Transport Commission, which includes New York State, issued a statement in support of “accelerat[ing] widespread adoption of zero-emission [MHDVs]” as a means to improve air quality throughout the region.¹⁴

Within the region, air pollution is not evenly distributed. Numerous studies demonstrate the impact of MHDV emissions in contributing to existing disparities. A nationwide study found that air pollution is variable within cities along racial and income lines—and that intracity inequalities, which are especially severe in New York and throughout the Northeast, are largely driven by diesel trucks.¹⁵ Other studies have linked localized air pollution levels and related health outcomes within New York City to patterns of truck and bus traffic.¹⁶ A recent study by

¹¹ Int’l Council on Clean Transp., Working Paper 2021-23, *Benefits of Adopting California Medium- and Heavy-Duty Vehicle Regulations in New York State* at 9, 13 (2021) (“ICCT ACT and HDO Analysis”), <https://theicct.org/sites/default/files/publications/nys-hdv-regulation-benefits-may2021.pdf>.

¹² M.J. Bradley & Assocs., *New York Clean Trucks Program* (2021) (“NY Trucks Report”), <https://www.ucsusa.org/sites/default/files/2021-09/ny-clean-trucks-report.pdf>.

¹³ RIS Summary at 7.

¹⁴ Additional information related to MHDVs and New York State’s ongoing challenges in bringing the state into attainment was provided to DEC in comments filed by several of the undersigned groups this summer. See Comments by Earthjustice et al., to N.Y.S. Dep’t of Env’tl Conservation., *Comments on New York State Draft State Implementation Plan Revision for the 2008 Ozone National Ambient Air Quality Standards*, (July 16, 2021), [attached as Attachment 2].

¹⁵ Mary Angelique G. Demetillo et al., *Space-Based Observational Constraints on NO₂ Air Pollution Inequality from Diesel Traffic in Major US Cities*, 48 *Geophysical Research Letters* (2021).

¹⁶ See Iyad Kheirbek et al., *The Contribution of Motor Vehicle Emissions to Ambient Fine Particulate Matter Public Health Impacts in New York City: A Health Burden Assessment*, 15 *Envtl. Health* 1, 5–8 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5002106/pdf/12940_2016_Article_172.pdf.

the New York City Environmental Justice Alliance used hyper-local monitoring to identify several air pollution “hot spots” adjacent to heavily trafficked facilities and corridors in the Bronx and Brooklyn.¹⁷ This finding confirms prior studies showing that the impact of air pollution near Hunts Point in the Bronx, which attracts thousands of truck trips per day, “varies across the community as a function of large truck traffic.”¹⁸ In Albany, Department of Health data reveals a “substantial and consistent” discrepancy in asthma hospitalization rates and other health outcomes between the South End neighborhood, which experiences “heavy truck and other diesel vehicle traffic” and other industrial activity at the Port of Albany, and similar neighborhoods further from the Port.¹⁹

Looking at New York State as a whole, approximately 2.7 million Latinos, 2 million African Americans, and 1.2 million Asian Americans experience concentrations of PM_{2.5} from transportation above the state average, representing 74% of the state’s Black and Latino residents and 80% of the state’s Asian American residents.²⁰ By contrast, more than two-thirds of white New Yorkers live in areas with transportation pollution well below the state average.²¹ The ACT rule will accelerate the transition to clean zero-emission vehicles, protect public health, and help tackle the climate crisis by reducing emissions from one of New York’s most polluting sectors: MHDVs. However, additional programs will be needed to ensure targeted emission reductions in environmental justice communities.

II. DEC MUST ACT SWIFTLY TO ADOPT THE ACT RULE.

DEC must adopt the ACT rule as a necessary first step to jumpstart the transition to zero-emission trucks and buses in New York State. By requiring sales of zero-emission vehicles (“ZEVs”) across various truck sectors, including Class 7 and 8 trucks, the ACT rule will accelerate the transformation of the transportation sector, which has historically contributed to, and in many cases driven, the stark inequity in exposure to toxic air pollutants experienced by New York State’s communities of color and low-income communities. The rule’s ZEV sales mandates are also critical to achieving the GHG emission reductions required by the CLCPA. And there are no technical or legal barriers to adopting the rule and implementing it as soon as possible.

A. The ACT Rule Will Reduce Toxic Emissions from MHDVs.

As mentioned above, electrification of MHDVs must be a major component of any strategy to improve air quality and public health throughout the state, and particularly in

¹⁷ N.Y.C. Env’tl Just. All., *Community Air Mapping Project for Environmental Justice* 5 (2021), <https://www.nyc-eja.org/wp-content/uploads/2021/02/CAMP-EJ-2020-Report-Final-021821-Reduced.pdf>.

¹⁸ T. Suvendrini Lena et al., *Elemental Carbon and PM_{2.5} Levels in an Urban Community Heavily Impacted by Truck Traffic*, 110 *Env’tl Health Persps.* 1009, 1009 (2002), <https://ehp.niehs.nih.gov/doi/pdf/10.1289/ehp.021101009>.

¹⁹ N.Y.S. Dep’t of Health, *Information Sheet: Albany South End Community Health Outcome Review* (2019), https://health.ny.gov/environmental/investigations/albany_south_end/southend_fact_sheet.pdf.

²⁰ Pinto de Moura et al., Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in New York State* 1 (2019), <https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-NY.pdf>.

²¹ *Id.* at 4.

environmental justice communities. A study in California found that diesel exposures accounted for 70% of the cancer risk posed by all air toxics.²² Yet last year, 97% of new heavy-duty vehicle sales and 65% of new medium-duty vehicle sales were diesel.²³ Clearly, state regulations are needed to move the MHDV market towards zero-emissions.

A study from the International Council on Clean Transportation (“ICCT”) found that ACT adoption would reduce annual NOx emissions by over 3,250 tons per year, and would eliminate a cumulative total of nearly 45,000 tons of NOx through 2050.²⁴ The ACT would also reduce annual PM2.5 emissions by 50 tons per year compared to a business as usual scenario and would eliminate a cumulative total of 640 tons of PM2.5 emissions through 2050.²⁵

Evidence from New York City shows how the current pattern of PM2.5 emissions from MHDVs leads to disparities in health outcomes. The ACT rule, paired with policies that target ZEV deployments, can start the process of eliminating diesel emissions, which as mentioned above, is the major driver of inequality in exposure to air pollution. Adoption of the ACT rule will avoid 237 premature deaths, 231 hospitalizations, and over 155,000 health issues associated with diesel trucking by 2050, according to another analysis by M.J. Bradley & Associates.²⁶

While adopting the ACT rule is an important first step, New York must also adopt additional measures designed specifically to ensure reductions in air pollution from transportation in communities of color and low-income communities (i.e., environmental justice communities). Environmental justice communities are exposed to disproportionately high levels of air pollution in New York and across the country.²⁷ The CLCPA requires the state, both in its scoping plan and in promulgating regulations designed to achieve mandatory GHG reductions, to prioritize and maximize the reduction of GHG and co-pollutant emissions in disadvantaged communities. While the ACT will reduce overall emissions from MHDVs, complementary policies are necessary to comply with the CLCPA and ensure those reductions benefit communities that are currently overburdened by pollution. Complementary, targeted policies could include creating zero-emission zones where the use of internal combustion engine vehicles is limited; replacing and retrofitting existing diesel equipment; establishing deployment and incentive programs for EV charging infrastructure; and mandating emission-reduction measures that target environmental justice communities, transportation corridors, and port regions. Additionally, the CLCPA requires a goal of 40% and no less than 35% of the benefits of climate-related investments, such as in the transportation sector, to accrue to disadvantaged communities. Under this provision, it is expected that future incentive programs and other investments meant to accelerate MHDV electrification should be targeted to disadvantaged communities.

²² Ralph Propper et al., *Ambient and Emission Trends of Toxic Air Contaminants in California*, 49 *Env’tl Sci. & Tech.* 11,329, 11,336 (2015).

²³ Eric Larson et al., Princeton Univ., *Net-Zero America - New York State Report 2* (Aug. 12, 2021) (“Net-Zero Report”).

²⁴ ICCT ACT and HDO Analysis at 16, tbl. A2.

²⁵ *Id.*

²⁶ NY Trucks Report at 14.

²⁷ See Press Release, N.J. Env’tl Just. All., *Study Reveals Importance of Driving Down Dirty Diesel Emissions in EJ Communities in Newark Area* (June 14, 2021), <https://njeja.org/newark-community-impacts-of-mobile-source-emissions/>.

B. The ACT Rule Is Critical to Achieving New York’s Climate Mandates.

DEC’s Regulatory Impact Statement states that the Proposed rule “[is] consistent with the requirements of the CLCPA . . . to further reduce [GHG] emissions in the State.”²⁸ The reality is much starker: there is no plausible way to achieve the CLCPA’s binding emission limits without adopting the ACT rule. Meeting the economywide emissions limit for 2050 will require a 86–97% reduction in transportation sector emissions by 2050.²⁹ Achieving emission reductions of this magnitude will require the “phase-out of internal combustion engine vehicles and replacement with electric drivetrains” across all on-road vehicle classes, according to the National Academies.³⁰ Modeling presented to the Transportation Advisory Panel demonstrates clearly that there is no scenario where this transportation sector-specific target is met without adoption of ACT and parallel ZEV mandates for passenger vehicles.³¹ The transition to electric vehicles must happen “almost immediately,” and the Pathways Analysis found that zero-emission vehicles will need to be “normalized” by 2030 in order to achieve midcentury limits, given the expectation that MHDVs can stay on the road for several decades.³² This slow rate of attrition will impede natural fleet turnover towards zero-emission MHDVs, making immediate implementation of the ACT rule a critical and immediate priority given the fact that ZEV adoption in MHDVs lags considerably behind that in light-duty vehicles.

Immediate implementation of ACT will also further the achievement of other important climate policies. In 2020, New York State joined 15 other states plus the District of Columbia in committing to 100% zero-emission truck and bus sales by 2050, with an interim goal that at least 30% of all new MHDV sales should be zero-emission by the end of this decade.³³ The current administration expanded on this commitment by signing into law A.4302/S.2758, which codifies a target to transition all medium- and heavy-duty vehicles to zero-emission alternatives where feasible by 2045, and with an analogous target to transition off-road vehicles by 2035.³⁴

C. The ACT Rule Will Create Jobs and Benefit the Economy.

In addition to cleaning up the environment and protecting public health, the ACT rule will also help drive economic growth in New York. A recent study by M.J. Bradley & Associates found that adopting the ACT in would create a net societal benefit of \$1.9 billion by 2050.³⁵ This

²⁸ RIS Summary at 1.

²⁹ Energy & Env’t Econ., *Pathways to Deep Decarbonization in New York State* 23 (2020) (“Pathways Analysis”), <https://climate.ny.gov/-/media/CLCPA/Files/2020-06-24-NYS-Decarbonization-Pathways-Report.pdf>.

³⁰ Nat’l Acads. of Sci., Eng’g, and Med., *Accelerating Decarbonization of the U.S. Energy System* 48 (2021) <https://www.nap.edu/catalog/25932/accelerating-decarbonization-of-the-us-energy-system>.

³¹ See N.Y. Climate Action Council, Transportation Advisory Panel Meeting 13 slides 22–23 (Apr. 9, 2021), <https://climate.ny.gov/Advisory-Panel/Meetings-and-Materials>.

³² Pathways Analysis at 45.

³³ Memorandum of Understanding, *Multi-State Medium- and Heavy-Duty Zero Emission Vehicle 2* (July 14, 2020), <https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf>.

³⁴ See Press Release, N.Y.S. Governor Kathy Hochul’s Office, *In Advance of Climate Week 2021, Governor Hochul Announces New Actions to Make New York’s Transportation Sector Greener, Reduce Climate-Altering Emissions* (Sept. 8, 2021), <https://www.governor.ny.gov/news/advance-climate-week-2021-governor-hochul-announces-new-actions-make-new-yorks-transportation>.

³⁵ NY Trucks Report at 24.

is because transitioning to ZEVs will enable significant fuel and maintenance cost savings for fleets, attract large charging infrastructure investments, create high-paying jobs, and put downward pressure on electricity rates for all customers.

Although electric truck purchase prices are rapidly declining, they remain higher than most comparable diesel trucks. However, zero-emission MHDVs cost less to service, maintain, and fuel over the lifetime of the vehicle, providing significant long-term cost savings to New York fleets. Due to manufacturing efficiencies from economies of scale and decreasing battery prices, the initial purchase prices of ZEVs are expected to continue falling. Currently, batteries are the single most expensive component of an electric truck. According to Bloomberg New Energy Finance, battery costs have decreased by 89% over the past ten years and continue to drop.³⁶ Upfront vehicle costs will continue to fall as battery prices decline over the ACT rule's implementation schedule. According to the latest total cost of ownership analysis by the California Air Resources Board ("CARB"), zero-emission MHDVs are projected to be cost competitive with combustion-powered vehicles over a variety of vehicle models.³⁷ The analysis also found that the payback period for when ZEV cost savings exceed the higher up-front price differential, ranges from five to ten years in 2025, and two to five years in 2030 and 2035, indicating that ZEVs are able to recoup their higher purchase prices relatively quickly.³⁸ As a result of lower total ownership costs, the ACT rule is expected to result in \$318 million in net fleet savings by 2050.³⁹ This amounts to, on average, total savings of \$30,000 per zero-emission MHDVs over the lifetime of the vehicle.⁴⁰

Accelerating the transition to ZEVs will support local jobs, including in the installation and maintenance of charging infrastructure. By adopting the ACT rule in 2021, New York can expect to attract over \$3 billion in public and private investment in charging infrastructure through 2050.⁴¹ For example, in New Jersey, where they recently solicited public comments on adopting the ACT rule, the Board of Public Utilities ("BPU") released a MHDV straw proposal that will unlock millions of dollars in ZEV charging infrastructure investments and fuel savings.⁴² New York can and should expect adopting the ACT rule to unlock additional resources and infrastructure investments.

Plugging in thousands of new electric trucks and buses will spread an increasing amount of electricity demand over the largely fixed costs of the system. Utility net revenue from increased electricity sales from the ACT rule is a cost savings that is projected to be passed on directly to customers, resulting in reduced utility bills.

³⁶ *Battery Pack Prices Cited Below \$100/kWh for the First Time in 2020, While Market Average Sits at \$137/kWh*, Bloomberg New Energy Finance, <https://about.bnef.com/blog/battery-pack-prices-cited-below-100-kwh-for-the-first-time-in-2020-while-market-average-sits-at-137-kwh/> (last updated, Dec. 16 2020).

³⁷ See Cal. Air Res. Bd., *Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document 4* (2021), https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf.

³⁸ *Id.* at 8.

³⁹ NY Trucks Report at 24.

⁴⁰ *Id.* at 17.

⁴¹ *Id.* at tbl. 4.

⁴² See N.J. Bd. of Pub. Utils., Docket No. QO21060946, *In re Medium and Heavy Duty Electric Vehicle Charging Ecosystem* (Aug. 12, 2021), <https://www.nj.gov/bpu/pdf/publicnotice/Notice%20Medium%20Heavy%20Duty%20EV%20Straw%20Proposal.pdf>.

Notably, Class 2b-3 ZEVs with gross vehicle weight ratings less than 14,000 pounds are eligible for the federal EV tax credit up to \$7,500.⁴³ Since the federal tax credit value declines after manufacturers sell a certain number of EVs nationwide, regulations such as the ACT rule that compels EV sales will help New York capture a greater portion of federal tax credits.

D. The ACT Rule Will Drive Electrification of MHDVs.

There are almost 684,000 Class 2b-8 trucks and buses on New York's roads, driving 11.5 billion miles annually throughout the state.⁴⁴ In 2020, over 97% of new heavy-duty vehicle sales in New York State, and nearly two-thirds of new medium-duty vehicle sales were diesel vehicles.⁴⁵ Those numbers will have to shrink considerably by 2035—down to 23% for heavy-duty vehicles and 14% for heavy-duty vehicles under some projections—to achieve mid-century decarbonization.⁴⁶ ZEVs will have to account for most of that difference.⁴⁷ Yet, across medium- and heavy-duty vehicle segments, ZEVs accounted for less than 1% of new sales in 2020.⁴⁸

The ACT rule will induce considerable growth in the population of zero-emission MHDVs deployed in New York State through 2050. The ICCT study quantified the number of zero-emission MHDV deployments attributable to the ACT, finding that its implementation will add over 25,000 zero-emission MHDVs in 2030.⁴⁹ That number will swell to over 228,000 zero-emission MHDV deployments attributable to the ACT rule by 2050, representing a substantial transition towards a fully zero-emission MHDV fleet.⁵⁰

These figures clearly contradict the suggestion by detractors of the ACT rule who wrongly claim that a sales mandate alone is insufficient to drive increased ZEV deployments and is thus doomed to fail. Sales mandates by themselves have worked before and will work again now. This type of mandate is not a new, untested concept: since 2005, California's Zero-Emission Vehicle Regulation has required manufacturers to produce and deliver for sale a certain percentage of zero-emission passenger cars and light-duty trucks in the state.⁵¹ Ten additional states—including New York—have adopted this rule, collectively covering 30% of new car sales in the U.S.⁵² China, Quebec, and British Columbia, Canada, have modeled their light-duty ZEV mandates on the California program.⁵³

While we strongly support the adoption of a zero-emission MHDV purchase requirement, sales mandates that apply to manufacturers, like the ACT rule, have spurred ZEV sales even in

⁴³ *Plug-In Electric Drive Vehicle Credit (IRC 30D)*, Internal Revenue Serv., <https://www.irs.gov/businesses/plug-in-electric-vehicle-credit-irc-30-and-irc-30d> (last updated June 27, 2021).

⁴⁴ NY Trucks Report at 4.

⁴⁵ Net-Zero Report at 2, tbl. 5.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ ICCT ACT and HDO Analysis at 12.

⁵⁰ *Id.*

⁵¹ See Cal. Code Regs. tit. 13, § 1962.2 (2018); see also *id.* § 1962; 1962.1.

⁵² Cal. Air Res. Bd., *States That Have Adopted California's Vehicle Standards Under Section 177 of the Federal Clean Air Act* (Aug. 19, 2019), https://ww2.arb.ca.gov/sites/default/files/2019-10/ca_177_states.pdf.

⁵³ See Cal. Air Res. Bd., *Draft: Assessment of CARB's Zero-Emission Vehicle Programs Per Senate Bill 498* at 74, 78–79 (Dec. 17, 2019), <https://ww2.arb.ca.gov/sites/default/files/2019-12/SB%20498%20Report%20Draft%20121719.pdf>.

the absence of a corresponding purchase requirement. A recent CARB analysis found that its ZEV regulation “provide[s] the stable, long-term signal that encourages manufacturers to make and sell ZEVs in the early market.”⁵⁴ Through model year 2019, 625,000 ZEVs have been sold in California under this program.⁵⁵ Manufacturers have more than met their requirements under the ZEV program, generating a surplus of credits to meet their ZEV requirements.⁵⁶ Thus, far from failing to meet the ZEV program requirements, manufacturers have been overperforming even without a regulatory purchase mandate.

Manufacturers have many tools at their disposal to encourage zero-emission MHDV purchases in the absence of a regulatory purchase mandate. The Northeast States for Coordinated Air Use Management (“NESCAUM”) has noted that, before Northeastern states adopted California’s ZEV regulations requiring manufacturers to deliver ZEVs to their markets, light-duty ZEVs were consistently less available for purchase in the Northeast compared to California, and that there was a “dramatic disparity” between manufacturers’ advertising spending on their gasoline models versus their ZEV models.⁵⁷ NESCAUM therefore concluded that lower sales rates of light-duty ZEVs were attributable to factors within the control of automakers.⁵⁸ MHDV manufacturers similarly are not beholden to consumer preference, but can affirmatively shape that preference through vehicle availability, marketing, purchase incentives, pricing, and other factors within their control.

Thus, while DEC must adopt rules to direct fleet turnover in the communities where it is most needed, DEC should not delay its adoption of the ACT rule and need not release both rules at once. As CARB explained in its supporting documents on the ACT rule:

A necessary first step [is] to ensure that ZEVs [are] supported by manufacturers and made widely available before placing requirements on fleets. . . . The manufacturer ZEV sales requirement needs to be in place first because of the lead time needed to develop and manufacture vehicles. . . . [A] manufacturer sales requirement is necessary to ensure ZEVs are available and fully supported before fleet rules can begin.⁵⁹

E. Zero-Emission MHDVs are Viable Today.

The market for zero-emission MHDVs is ready to support ACT rule adoption in New York State. New York is a “high-potential” state for truck electrification, with only one state

⁵⁴ *Id.* at 82.

⁵⁵ Cal. Air Res. Bd., *2019 Zero Emission Vehicle Credits* 3 (2019), https://ww2.arb.ca.gov/sites/default/files/2020-10/2019_zev_credit_annual_disclosure.pdf.

⁵⁶ *See id.* at 2 (noting a California ZEV credit balance of over 1.2 million); *See also* N.J. Dep’t Env’tl Protection, *2019 Zero Emission Vehicle Credits* 3 (Jan. 21, 2021), <https://www.nj.gov/dep/cleanvehicles/2019ZEV.pdf> (noting a New Jersey ZEV program credit balance of 344,000).

⁵⁷ Letter from Arthur N. Marin, Exec. Dir., NESCAUM to Elaine Chao, Sec’y, U.S. Dep’t of Transp. at 10 & exhibits 2 and 3 (Oct. 18, 2018), https://ww2.arb.ca.gov/sites/default/files/2020-10/2019_zev_credit_annual_disclosure.pdf.

⁵⁸ *Id.* at 10.

⁵⁹ Cal. Air Res. Bd., *Advanced Clean Trucks Regulation: Final Statement of Reasons* 13 (March 2021), <https://ww3.arb.ca.gov/regact/2019/act2019/fsor.pdf>.

scoring higher across eight indicators of zero-emission MHDV readiness.⁶⁰ The North American Council for Freight Efficiency and RMI conclude that fleets with trucks operating regional haul routes of 230 miles or less per shift in New York State and other “high-potential” regions “should immediately begin planning for electric truck deployments.”⁶¹

Indeed, the latest data supports DEC’s conclusion that most commercial MHDVs in use today have duty cycles and characteristics that support widespread electrification (such as relatively limited ranges, predictable routes, and fixed locations).⁶² The market for zero-emission MHDVs serving these operations is relatively mature already, and market trends indicate that DEC is correct to assume that technological advancements will expand the realm of MHDV applications for which ZEVs will become viable. There has been considerable growth in the MHDV market in just the last two years, and by 2025 the market will evolve further, with multiple companies expected to sell zero-emission MHDVs in nearly all market segments.⁶³

Currently, 30 companies offer at least one medium- and heavy-duty ZEV for sale commercially—covering every class of truck—which will grow to at least 40 by 2025.⁶⁴ Commercial ZEV offerings today are capable of supporting the majority of truck duty cycles⁶⁵ and rapid technological progress is unlocking electrification of even the most demanding duty cycles. Adopting the ACT rule will act as an accelerator to increase the supply of zero-emission MHDVs, achieve economies of scale from higher production volumes, lower costs, and encourage solutions to increase demand and capture significant savings.⁶⁶

These findings are confirmed by a recent M.J. Bradley & Associates analysis, which breaks down the entire MHDV universe into seventeen discrete market segments and evaluates the prospects for near-term electrification based on four factors central to fleet owner procurement considerations: commercial market, charging, technical feasibility, and business case.⁶⁷ The analysis found that a majority of these segments, accounting for roughly two-thirds of the in-use MHDV fleet, score favorably on at least three out of four factors, indicating “strong potential for near-term EV uptake.”⁶⁸ Electrifying these segments in the near-term will yield considerable benefits in terms of GHG emission reductions and health-harming NOx and PM

⁶⁰ See N. Am. Council for Freight Efficiency & RMI, *High-Potential Regions for Electric Trucks Data Analysis Tool* (2020), <https://nacfe.org/wp-content/uploads/2020/08/High-Potential-Regions-for-Electric-Trucks-Data-Analysis-Tool.xlsx>.

⁶¹ N. Am. Council for Freight Efficiency & RMI, *High-Potential Regions for Electric Truck Deployments* at 9 (2020), <https://rmi.org/insight/high-potential-regions-for-electric-truck-deployments>.

⁶² See N.Y. Dep’t of Env’tl Conservation, *Regulatory Flexibility Analysis for Small Businesses and Local Governments 3* (2021), https://www.dec.ny.gov/docs/air_pdf/proposed218.pdf.

⁶³ M.J. Bradley & Assocs., *Medium- and Heavy-Duty Vehicles: Market Structure, Environmental Impact, and EV Readiness 21* (2021) (“MJ Bradley Market Analysis”), <https://www.mjbradley.com/sites/default/files/EDFMHDVEVFeasibilityReport22jul21.pdf>.

⁶⁴ *Id.*

⁶⁵ *See id.*

⁶⁶ Chris Busch et. al., Energy Innovation & Env’tl Def. Fund, *Clean Trucks, Big Bucks: California Energy Policy Simulator Evaluation of the Proposed Advanced Clean Trucks Rule* (2020), https://energyinnovation.org/wp-content/uploads/2020/06/Clean-Trucks-Big-Bucks_June_17_2020.pdf.

⁶⁷ MJ Bradley Market Analysis at 5.

⁶⁸ *Id.*

emissions. Furthermore, “[v]irtually all market segments” could be “fully mature” by 2025⁶⁹—when the ACT rule will phase in in New York State.

The prospects for truck electrification are not merely theoretical. The *Run on Less-Electric* demonstration project completed earlier this year collected operational data from real world electric truck fleets in several applications, including delivery vans, box trucks, port terminal tractors, and heavy-duty semi-tractor-trailers. The 13 companies that participated in the demonstration project found that electric trucks not only “perform[] better than recent diesel” models, but in the applications tested, did not inhibit operations due to range or refueling needs.⁷⁰ Extrapolating from this data, nearly half of the trucks in use today may be suitable for electrification now.⁷¹

F. The Proposal Is Inherently Flexible and Designed for an Evolving Market.

Another critique of the ACT rule is that the state would be unable to accommodate a sudden surge in zero-emission MHDV uptake at this stage and should thus delay adoption for multiple years. Yet this argument fails to understand the inherent flexibility built into the ACT rule. The ACT rule is in fact designed to accommodate an evolving zero-emission MHDV market and was developed with full recognition of the need to support ZEV deployment with supporting policies.

Following the two-year lead time from adoption to implementation, the ACT rule begins with low sales requirements and increases gradually, leaving time for ZEV technology to improve, the supporting ecosystem to mature, and vehicle prices to decline. The ramp-up in sales requirements is modest: from adopting the rule in 2021, to the second year of compliance in calendar year 2025, the sales requirement only grows to 10–13% of new sales. As discussed above, analysts expect significant advancements in range and efficiency in the intervening years, expanding suitability for a wider spectrum of ZEV uses and classes. The lead time and gradual phase-in will also allow New York State to implement the supporting policies that critics of the ACT rule are calling for, including the Public Service Commission’s expected MHDV Make-Ready infrastructure program.

It is inarguable that the ACT in itself won’t be enough to deploy electric vehicles in sufficient numbers to achieve important climate and clean air targets. To that end, among the complementary policies that will be needed to facilitate a transition to zero-emission vehicles will be sufficient infrastructure for a variety of fleet use cases. The New York Public Service Commission should be required to build utility programs that can help move the needle on infrastructure deployment and grid-beneficial rates. However, development of such infrastructure programs cannot and should not be a reason to delay adoption of the ACT rule—these regulations will not be implemented immediately, and as stated earlier, are designed to be flexible. As such, these efforts can and should happen in tandem.

While unique use cases that are harder to electrify, such as snowplows, may persist, as we discuss earlier, large percentages of each state’s truck fleet will be suitable for a transition to

⁶⁹ *Id.* at 6.

⁷⁰ Jeff St. John, *Electric Trucks Could Handle Millions of Short-Haul Routes Across North America*, Canary Media (Sept. 23, 2021), <https://www.canarymedia.com/articles/electric-vehicles/electric-trucks-could-handle-millions-of-short-haul-routes-across-north-america>.

⁷¹ *See id.*

ZEVs over the ACT rule's lifetime. The existence of potential edge cases does not negate the viability and effectiveness of the rule, especially in a market as dynamic as ZEVs. Just a few days ago, manufacturers announced an order for a fully-electric fire truck that will be deployed next year, underscoring the rapid evolution of zero-emission technology across commercial sectors.⁷² Further advancements should be expected on the heels of the U.S. Department of Energy's recent announcement that it is investing a total of \$127M in some of the leading vehicle manufacturers to pioneer cutting-edge zero-emission MHDV technologies, including Class 8 vehicles with ranges exceeding 400 miles.⁷³

Further, the ACT rule employs credit mechanism systems that incentivize voluntary early action and permit a high degree of compliance flexibility. For example, the ACT rule allows zero-emission credit trading between manufacturers and between most truck classes, accounting for vehicle size, enabling manufacturers to shift credits from truck segments ripe for electrification to those that are less suitable. The ACT rule can also accommodate potential fluctuations in vehicle sales from year-to-year. The rule does this by basing manufacturers' ZEV credit requirements on average truck sales data from the previous three years. In that way, peaks or troughs in purchases due to economic or regulatory forces are smoothed and have minimal impact on the overall trajectory of ZEV sales.

G. Fleets Stand to Benefit and Are Unlikely to Relocate.

There are significant benefits inherent in more stringent standards. When reviewing market growth in response to 2007 and 2010 federal engine standards, there was smooth growth in vehicle demand prior to, and during implementation of the 2014 Phase 1 fuel efficiency and emissions standards. Indeed, the purchase of MY 2014 vehicles was higher than any year since 2005.⁷⁴ This demonstrates that strict standards do not dampen adoption of cleaner vehicles and fuel cost savings are an important component of making the economic case for the transition.

It should also be noted that "the pre-buy in response to 2007 criteria pollutant standards [was found] to be approximately symmetric, short-lived, and small in volume relative to previous estimates,"⁷⁵ indicating that fears of mass purchase of more polluting vehicles before implementation of a standard may not come to fruition. The bottom line is that, rather than seeing fleets buy dirtier, ostensibly cheaper vehicles in a panic, there is clear evidence that no meaningful adjustment in market purchasing occurs as a result of these standards. Fleets recognize the cost savings over time of cleaner vehicles and do not seem inclined to ignore those

⁷² *REV Group Receives Order to Build First Fully-Electric Fire Truck in North America*, Electrek, <https://electrek.co/2021/11/01/rev-group-receives-order-to-build-first-fully-electric-fire-truck-in-north-america/> (last updated Nov. 1, 2021).

⁷³ Press Release, U.S. Dep't of Energy, *DOE Announces Nearly \$200 Million to Reduce Emissions from Cars and Trucks* (Nov. 1, 2021), <https://www.energy.gov/articles/doe-announces-nearly-200-million-reduce-emissions-cars-and-trucks>.

⁷⁴ *Healthy Demand Overall for Trucks in September*, Heavy Duty Trucking, <https://www.truckinginfo.com/125740/healthy-demand-overall-for-trucks-in-september?ref=rel-recommended> (last updated Oct. 3, 2014).

⁷⁵ K. Rittenhouse & M. Zaragoza-Watkins, *Strategic Response to Environmental Regulation: Evidence from U.S. Heavy-Duty Vehicle Air Pollution Regulations* MIT CEEPR Working Paper (2016).

benefits to reap the marginally lower purchase price of more polluting vehicles while they still can.

III. THERE IS NO LEGAL OBSTACLE TO DEC ADOPTING THE ACT RULE.

DEC has full legal authority to adopt the ACT rule and take a necessary first step to reduce emissions throughout New York and particularly in the state's overburdened communities. Clean Air Act Part D, Section 177 specifies, "any State *which has plan provisions approved under this part* may adopt and enforce for any model year [California] standards relating to control of emissions from new motor vehicles or new motor vehicle engines."⁷⁶ "Plan provisions approved under this part" applies both to nonattainment plan provisions and maintenance plan provisions, both of which EPA approves under Clean Air Act Part D.⁷⁷ Because EPA has approved multiple New York nonattainment and maintenance plan provisions, New York satisfies the threshold requirement of Section 177 to adopt the California Standards. Indeed, New York's most recent Draft Proposed Revisions to the State Implementation Plan for the 2008 ozone NAAQS demonstrate that the New York Metro Area continues to be in nonattainment past the July 2021 deadline, and that mobile source emissions are a key reason.⁷⁸

Given the urgency of the climate crisis, the need to move forward quickly to reduce emissions, and the acute public health need to reduce pollution from diesel trucks, New York should act expeditiously to adopt these regulations by the end of 2021. Failure to do so would result in key program milestones lapsing, running the risk of letting an entire ACT compliance year slip by. The real-world implications are stark: even a one-year implementation delay would result in hundreds of additional diesel trucks on our roads instead of viable zero-emission alternatives, emitting carcinogenic exhaust into our neighborhoods and harming our climate for the next two decades.

Contrary to some industry assertions, the potential for updated federal regulations actually serves to reinforce, rather than undercut, the need for swift state-level action to adopt California's MHDV emission standards. While the details on potential federal action remain unclear, the ACT rule and related policies provide a certain path to advance MHDV electrification. Immediate ACT adoption is the best opportunity to achieve nearer-term reductions and associated health and economic benefits in advance of federal standards. And, they can be a durable and powerful catalyst for ambitious action at the federal level.

Because of the required lead time for implementation under the Clean Air Act, by adopting the ACT rule now New York will be in step with the timeline contemplated by the Climate Action Council's Transportation Advisory Panel, which is likely to be incorporated into the draft scoping plan set to be released before the end of 2021. The first component that the Panel recommended as necessary to achieve zero-emissions trucks, buses and heavy equipment,

⁷⁶ 42 U.S.C. § 7507 (emphasis added).

⁷⁷ See 42 U.S.C. §§ 7502(c), 7505a (concerning nonattainment and maintenance plans, respectively, both under Part D); see also *Am. Auto. Mfrs. Ass'n v. Comm'r, Mass. Dep't of Env't Prot.*, 31 F.3d 18, 23 n.2 (1st Cir. 1994) (correctly explaining that Section 177 says that "any State which has plan provisions [for the attainment and maintenance of the NAAQS] may adopt and enforce for any model year standards . . ." (paraphrasing in original)).

⁷⁸ N.Y. Dep't of Env'tl Conservation, *Draft New York State Implementation Plan for the 2008 Ozone National Ambient Air Quality Standards* (2021), https://www.dec.ny.gov/docs/air_pdf/sipseriouso3nyrna.pdf.

was that DEC “Adopt Zero Emissions Vehicle Sales Regulations.”⁷⁹ The Transportation Advisory Panel anticipates a 1–2-year timeline to implement sales regulations like the ACT rule. There is no need for DEC to wait for any further instructions or measures from the Climate Action Council, as adopting the rule now would be in line with the implementation contemplated by the Transportation Advisory Panel recommendations. In fact, delaying adoption of the rule would put New York behind the timeline likely to be included in the state scoping plan.

IV. DEC SHOULD EVALUATE WAYS TO STRENGTHEN THE PROPOSAL.

To avoid missing compliance years and delaying the rule’s sweeping benefits, it is imperative that New York adopt the ACT rule by the end of 2021. While some of the rule’s opponents have raised misleading and/or misinformed reasons for delay, a previously submitted letter to DEC refutes those unsupported arguments.⁸⁰ Additionally, as mentioned above, we offer below several recommendations that should be included in the final rule.

H. Early Crediting Should Be Limited to One Year.

Early crediting does not incentivize the switch to ZEVs and mainly captures purchases that would have already taken place. We urge DEC to only allow early crediting for Model Year 2024. This would minimize the potential negative impact early crediting could have on the rule’s stringency and as a result its benefits. Also, offering one year of early crediting is consistent with what other Section 177 states are considering, notably New Jersey.

I. DEC’s Proposed Fleet Reporting Rule Should Be Strengthened.

We also appreciate DEC’s proposal to adopt a fleet reporting rule, which will provide necessary information to DEC and the public about the state of New York’s fleets. But DEC must make a number of improvements to ensure robust and up-to-date reporting from as many fleets as possible. DEC’s proposed 50-vehicle threshold is set too high and would fail to cover the majority of New York’s MHDVs, which operate in much smaller fleets. Therefore, we recommend that DEC lower this reporting threshold to 5 or more vehicles and require *all* tractors and drayage trucks to submit reports under the reporting rule. This lower threshold better reflect New York’s smaller MHDV fleet compared to CA and affords several key benefits:

- Identifying areas with high rates of freight traffic and, consequently, diesel pollution, allowing New York to target clean transportation policies to the communities that need relief most;
- Shed light on exploitative labor practices, such as misclassifying drivers as independent contractors. Misclassification is rampant in the trucking industry, particularly in the drayage segment. These trucks are among the oldest and dirtiest vehicles on the road and are excellent for zero-emission technology given their short-haul, idling, and stop-and-go operations. Due to misclassification, many drivers lack financial resources to upgrade

⁷⁹ N.Y. Climate Action Council, Transportation Advisory Panel Meeting 13 at slide 37.

⁸⁰ Comments by Earthjustice to N.Y.S. Dep’t of Env’tl Prot., *New York’s Adoption of California Mobile Source Standards Under the Clean Air Act* 15 (May 27, 2021), [attached as Attachment 3].

their equipment to reduce diesel pollution or buy a zero-emission truck. DEC will need the most granular information possible to direct funding and regulations towards entities that control fleets to make sure they comply with emissions reductions and electrification goals rather than shifting the responsibility to drivers who often do not have the resources to comply. Adopting the rule could turn a historically polluting industry into a source of high quality, green jobs in trucking, manufacturing, and charging infrastructure installation; and

- Help utilities make better informed electric utility investments today to install the charging infrastructure necessary to support zero-emission MHDVs. It will also enhance utility distribution system planning efforts that are vital in the transition to clean vehicles as a well-designed grid can lower bills for all customers by avoiding expensive system upgrades.

As the proposal points out, this one-time reporting requirement should not be too time consuming and will take between 4–10 hours to complete for businesses in a single facility category, and up to 40 hours for businesses with multiple facilities throughout the state. However, other states have projected that the reporting requirement will take on average 4 hours of time to complete and since fleets already collect this information, we believe that shorter reporting times for New York will also be expected. DEC should also require this reporting periodically—a minimum of every three years—to track progress and collect data to determine how best to support the state’s fleets.

V. ADDITIONAL POLICIES WILL BE NEEDED TO REALIZE ENVIRONMENTAL JUSTICE, AIR QUALITY, CLIMATE, AND LABOR GOALS.

To achieve the bold GHG reduction commitments in the CLCPA, it will be necessary to rapidly accelerate the deployment of ZEVs, including MDHVs. Even with the ACT rule and 100% light-duty ZEV sales in place, preliminary modeling shows that GHG emissions from transportation will only be reduced by 55% in 2050, compared to a reference case scenario.⁸¹ Fully implemented, the ACT rule will still allow 25–60% of sales to be combustion engines in certain segments. New York should view adoption of the ACT rule as a necessary first step in achieving the transformative changes necessary to decarbonize the transportation sector, but not the only strategy. We must strive for 100% ZEV sales across MHDVs where feasible, and take bold actions to get there.

One way for New York to start this transformation is to “lead by example,” in line with the Multi-State Memorandum of Understanding, which affirms the state’s commitment to “progress toward electrification of its government and quasi-governmental agency fleets.”⁸² New York should convert all state MHDV fleets to zero-emission vehicles where feasible, as soon as possible, and work with cities and counties to do the same. Several municipalities will require all vehicle purchases to be electric by 2030, and the state should be able to meet a similar timeline.

⁸¹ N.Y. Climate Action Council, Meeting 8 slide 20 (Feb. 26, 2021), <https://climate.ny.gov/-/media/CLCPA/Files/2021-01-26-CAC-Meeting-presentation.pdf> (presenting preliminary NYSERDA findings on vehicle sales, stocks, and emissions).

⁸² Memorandum of Understanding, *supra* note 33 at 4.

In addition, once it is finalized, New York should adopt California’s Heavy-Duty Omnibus rule and forthcoming Advanced Clean Fleets rule, which are vital complements to the ACT rule and support the state’s goals of achieving near-term emission reductions while transitioning to a zero-emission truck and bus fleet by 2045 statewide.

And while implementing new MHDV emission standards will lead to a boost in clean energy jobs, the state must ensure that workers in affected industries do not shoulder the short-term costs of transitioning to a zero-emissions transportation sector, and that new workers in the zero-emissions transportation sector can expect good wages and benefits. New York must also continue its efforts to ensure that the new jobs created by this transition offer good, family sustaining wages and benefits.

A. Emission Reductions in Environmental Justice Communities Must Be Prioritized.

As DEC moves forward with these regulations, the state should develop a strategy to accelerate fleet turnover to the maximum extent practical. In particular, DEC should develop a plan to identify where the dirtiest diesel engines are still operating and target incentives and other activities to get those vehicles off the road. Such a policy offers an opportunity to reverse the legacy of environmental injustice in New York State. Targeted air quality monitoring can help identify communities with elevated exposures to air pollution and the types of sources contributing to those exposures and figure out where investments in ZEV technology are most needed. Additional targeted strategies will be needed to ensure that the communities most harmed by transportation pollution are prioritized in statewide emissions reduction efforts, in line with the CLCPA.

- Electrifying Ports, Warehouses, Distribution Centers, School Bus Depots, Refuse Truck Depots, and Other Freight Hubs. New York State should target infrastructure build out, ZEV incentives, and other state policies and resources to accelerate the phase-out of all diesel and fossil fuel-powered vehicles in facilities with significant MHDV volumes. The cumulative impact of emissions from such facilities adversely impacts workers, residents, and children who attend school close by. Prioritizing electrification in these locations is one of the most important ways to address the systemic inequities inherent in our current transportation system. DEC should follow the lead of the South Coast Air Quality Management District in California by using authority under the Clean Air Act to establish an “Indirect Source Rule” to limit emissions from such facilities. DEC should also collaborate with stakeholders to develop zero-emissions ports and distribution centers, modeled on the Port of Long Beach’s Zero-Emissions Terminal Equipment Transition Project.
- Accelerating Deployment of Zero-Emission Transit and School Buses. Analysts suggest that transit and school buses are the two most mature zero-emission MHDV market segments today. Yet, electric bus deployments still represent a tiny fraction of vehicles in bus fleets throughout the state. A recent study found that electrifying public transit buses would provide the biggest “bang for the buck” in terms of emission reductions and

avoided health impacts.⁸³ New York State should pursue policies to aggressively deploy zero-emission transit and school buses, and to phase out fossil fuel-powered buses as soon as possible, in line with the “Green Transit, Green Jobs” bill package proposed in the Legislature and New York City’s recently enacted all-electric school bus legislation.

- Low and No-Emission Zones. DEC should identify areas overburdened with MHDV emissions and develop model rules to create low-emission or zero-emission zones to encourage rapid ZEV deployment in these areas. Such policies could be modeled after those implemented at the Ports of Los Angeles and Long Beach, which will impose fees on diesel and natural gas trucks accessing the ports, while exempting ZEVs.⁸⁴
- Adopting Other California Vehicle Emission Standards. California has adopted or is planning to adopt emission standards for a range of other vehicle segments not covered by their standards for on-road light-duty vehicles and MHDVs. Examples include HDO, drayage trucks serving ports and railyards, cargo handling equipment, and transport refrigeration units. These rules could have a significant impact on air quality and public health in some of the most heavily impacted communities in New York State. DEC should join New Jersey, which has already expressed intent to adopt emission standards for some of these segments.

Electrifying the full fleet of MHDV segments presents a significant opportunity to achieve meaningful public health improvements in disadvantaged and heavily impacted communities throughout the state. Doing so would yield billions of dollars in reduced health costs and improved health outcomes. Our groups look forward to working with your agency to develop these additional and supporting policies.

B. Investments in Zero-Emissions Transportation Should Directly Benefit Workers.

As the state implements ACT and develops supporting policies to accelerate zero-emission MHDV uptake, it is critical to understand and mitigate the impact that the transition to ZEVs will have on existing workers. As an initial matter, electrification should benefit drivers’ health, since drivers have high exposures to diesel pollution. However, electrification could be disruptive for drivers and a host of other workers in jobs related to combustion vehicles including mechanics, workers at gas stations and along the gasoline/diesel supply chain, and others. There are also opportunities to use state investments to advance a just transition by ensuring that new jobs offer fair wages and benefits and spur job creation among in disadvantaged communities, while addressing existing problems like driver misclassification. Similarly, the state should ensure mechanics trained on maintenance of combustion engines are retrained and have good job opportunities in maintenance for electric vehicles or related jobs in installing and maintaining charging infrastructure. The “Green Transit, Green Jobs” bill package (S3535B/A3090 & S3405/A2083), which would simultaneously speed up the transition to zero-

⁸³ See *Transportation Emissions Generate Air Pollution That Has a Large Death Toll*, Harvard T.H. Chan Sch. of Pub. Health, <https://www.hsph.harvard.edu/c-change/news/trechsources/> (last updated June 6, 2021).

⁸⁴ See Leslie Aguayo et al., Union of Concerns Scientists & The Greenlining Inst., *Low- and Zero-Emissions Zones* (2021), <https://www.ucsusa.org/sites/default/files/2021-06/low-and-zero-emissions-zones.pdf>.

emission transit buses while leveraging public investment to encourage the growth of high-quality green jobs and provide for retraining of diesel-reliant workers, points to one way forward.

CONCLUSION

Thank you for the opportunity to provide comments on this important rule. We encourage the state to act quickly. Given the slow rate of vehicle turnover, any delay in moving forward with adopting California's truck emission standards will compound the challenges in achieving New York's landmark climate commitments. Therefore, in order to maximize benefits and ease the transition into the ACT's sales requirements, New York should adopt these regulations by the end of 2021.

Respectfully,

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Earthjustice

Allergy & Asthma Network	Natural Resources Defense Council
Alliance for Clean Energy NY	New York City Environmental Justice Alliance
Alliance of Nurses for Healthy Environments	New York Lawyers for the Public Interest
Asthma & Allergy Foundation of America	New York League of Conservation Voters
Catskill Mountainkeeper	New York Public Interest Research Group
Concerned Health Professionals of New York (CHPNY)	New York State Public Health Association
David O. Carpenter, M.D. Director, Institute for Health and the Environment, University of Albany*	North Brooklyn Neighbors
El Puente	NY Renews
Environmental Advocates of New York	Radix Ecological Sustainability Center
E2 (Environmental Entrepreneurs)	Sierra Club
Environmental Defense Fund	Tri-State Transportation Campaign
GreenLatinos	Union of Concerned Scientists
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