

**EPN Comments on EPA's Proposed Rule:  
Control of Air Pollution from New Motor Vehicles:  
Heavy-Duty Engine and Vehicle Standards**  
Docket No.: EPA-HQ-OAR-2019-0055-0983  
May 16, 2022

Founded in 2017, the [Environmental Protection Network](https://www.epn.org/) (EPN) harnesses the expertise of more than 550 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators with decades of historical knowledge and subject matter expertise.

EPN is pleased to comment on EPA's proposal to "reduce air pollution from highway HD vehicles and engines, including ozone, particulate matter, and greenhouse gases." 59 Fed. Reg. 17414 (March 28, 2022). EPN's comments address EPA's proposal to adopt more stringent standards for oxides of nitrogen (NO<sub>x</sub>) and greenhouse gas (GHG) emissions.

### **NO<sub>x</sub>**

EPN recommends that EPA's decision be guided by the demonstrated need for very large NO<sub>x</sub> reductions from the heavy-duty (HD) sector. This need is especially great for those populations living near major traffic areas. The goal should be to achieve the lowest feasible NO<sub>x</sub> standard, which will provide California, other states, and disadvantaged communities the NO<sub>x</sub> reductions they desperately need.

EPN advocates that decisions on the level of the standards, the useful life period, the applicable Model Years (MY), and other standard-setting and compliance related issues should all be guided by this goal. This means that when EPA balances the various relevant factors, EPN recommends that EPA place great weight on the clear need for major NO<sub>x</sub> reductions to protect public health and welfare. EPN suggests that EPA should be clear in its reasoning that this factor appropriately carries great weight, and that it is an important part of EPA's justification for deciding to make changes in the direction of more, not less, reduction of NO<sub>x</sub> emissions.

Electric vehicles (EVs) play an important role in achieving major NO<sub>x</sub> reductions in our country. EVs are a critically important component of a multi-pollutant emissions control strategy. The HD sector is already transitioning to EVs, with new announcements almost every day of plans to build and buy EVs for the HD sector. Progress is sure to accelerate given the immense public and private investments taking place. This includes support at the federal level, such as the recently passed Infrastructure Investment and Jobs Act, as well as many states providing financial and other support for this transition.

Allowing EVs to generate NO<sub>x</sub> credits used by manufacturers of internal combustion (IC) engines is a major change in the HD program. The NO<sub>x</sub> standard currently applies to the manufacturers of IC engines that are used in HD vehicles. Unlike the program for light-duty vehicles, EVs in the HD sector are not included in the demonstration a manufacturer makes to show compliance with the NO<sub>x</sub> standard for IC engines. Manufacturers upgrade and improve their IC engines and use the resulting reduction in NO<sub>x</sub> emissions to demonstrate compliance with the HD engine standards.

EVs clearly reduce emissions of NO<sub>x</sub>, along with other pollutants such as particulate matter (PM) and GHGs. A critical reason to promote the transition to EVs is their tremendous potential to reduce harmful emissions from HD vehicles. The importance of promoting EVs as a critical multi-pollutant control strategy does not mean EVs should be used in a way that undercuts emission control from IC-powered vehicles.

Unfortunately, EPA's proposed allowance for EV NO<sub>x</sub> credits does just that. EPN believes it is highly likely that most, if not all, of the EVs used to generate NO<sub>x</sub> credits would be produced with or without the proposed NO<sub>x</sub> credits. The NO<sub>x</sub> credits would not appear to incentivize any real increase in production of EVs, given the current market transition already underway. Since the NO<sub>x</sub> reductions from these EVs would occur without the allowance for credits, allowing the credits produces no greater NO<sub>x</sub> reductions than would otherwise occur. However, allowing the credits will lead to greater NO<sub>x</sub> emissions from IC engines, especially diesel engines, than would occur without the credits. This means EPA's proposed Zero-Emission Vehicle (ZEV) NO<sub>x</sub> credits could cause a substantial increase in NO<sub>x</sub> emissions from IC engines compared to what could and should occur with no offsetting reductions. It runs counter to the core goal of achieving major reductions in NO<sub>x</sub> emissions, and EPA fails to justify the need to allow this increase in emissions. EPN opposes the proposed allowance for NO<sub>x</sub> credits from EVs.

If EPA decides to adopt some form of NO<sub>x</sub> credits for EVs, EPN recommends that EPA severely limit their allowance. For example, no credits should be allowed for MYs prior to MY 2027, the first year that more stringent NO<sub>x</sub> standards would apply. The amount of such early credits could be very large, based on the difference between zero emissions and the current NO<sub>x</sub> standard, which is approximately 10 times higher than the proposed standards. Allowing EVs to generate very large numbers of credits against the current standard would be a windfall that could seriously undercut the future, more stringent NO<sub>x</sub> standards. EPN recommends that at most, EPA allow any credits generated prior to MY 2027 to be based on the difference between zero and the level of the NO<sub>x</sub> standards that would apply in MYs 2027 and later. EPN also suggests that EPA not allow EVs to both show compliance with the revised GHG standards and generate NO<sub>x</sub> credits. A manufacturer should use EVs to either generate NO<sub>x</sub> credits or use the EV in its compliance demonstration for the revised GHG standards, but not both. This would mean the volume of EVs generating NO<sub>x</sub> credits are above and beyond those produced to meet the GHG standards. This would at least move in the direction of reducing the risk that NO<sub>x</sub> credits are from EVs that would have been produced in any case.

EPN is not suggesting these options because we believe they are a reasonable or appropriate approach, but only as options to reduce the adverse emissions impact if EPA decides to allow NO<sub>x</sub> credits for EVs. EPN believes that EPA would have to clearly and robustly justify the technological or other need to provide manufacturers with this relaxation in the stringency of the NO<sub>x</sub> standard. EPN feels that EPA should not lightly decide to allow NO<sub>x</sub> credits for EVs given the transition already occurring without the credits and the great need for NO<sub>x</sub> reductions. It would take a clear and strong case to justify any allowance for NO<sub>x</sub> credits for EVs, and EPA's proposal fails to provide one.

### GHG

EPN recommends that the GHG proposal be significantly strengthened. The proposal lacks any ambition whatsoever and reinforces that EPA is now the laggard in reducing HD GHGs rather than the leader. The recent Intergovernmental Panel on Climate Change (IPCC) Report makes clear that now is the time for strong action to address the climate crisis. EPA's proposal fails to step up to this challenge and is an important lost opportunity.

EPA properly includes EVs in its technology basis for setting the level of the revised GHG standards. EPA properly recognizes that many important circumstances have changed since the Phase 2 GHG standards were adopted—the quickening pace of EV development and use, adoption of regulations by California and other states, actions by countries across the world, and the immense investments being made and planned by industry and governments for the transition to EVs in the US and elsewhere.

EPN agrees and supports that now is the time to use this technology as part of the basis for setting the level of the GHG emissions standards. The problem is EPA appears to aim at a level that does no more than codify business as usual and, in fact, likely underestimates near-term EV sales in the HD sector. EPA's traditional approach to standard-setting analyzes the need for emissions reductions and the kinds of technologies that could achieve reductions, including the history of prior use, advances to date, cost, feasibility, lead time considerations, and other factors. EPA then sets the standard at a level that reflects a projection of technology penetration that could occur and reasonably balances the various factors. This projected rate of penetration is almost always more than what industry and the market already plan to do. EPA's proposal does not take this approach. It is a missed opportunity to promote the degree of near-term EV penetration necessary to begin to address the climate crisis.

EPN recommends that EPA set standards that aim for very high ZEV penetration for school buses and urban transit buses by MY 2029. For delivery vans and short-haul tractors, EPN recommends EPA aim for a much more aggressive, but practical, penetration rate by MY 2029 than proposed. More ambitious GHG standards will accelerate the introduction of zero-emissions technologies for all pollutants and set the stage for the standard setting in the next, longer-term rulemaking. The country can't rely on business as usual, whether for MYs 2027-29 or for MYs 2030 and later.

With respect to multipliers for EVs in the GHG program, EPN agrees that the current approach is no longer appropriate. The transition to EVs is already underway and is expected to increase. In the near-term, the increase in production will continue to reduce the “cost differential between EVs and conventional vehicles,” and the emissions effects of the multipliers reduces “the effective stringency of the existing MY 2024 through 2027 standards.” See 59 Fed. Reg. at 17603.

EPN believes multipliers for EVs should not be allowed after MY 2026. The stringency of the standard in MY 2027 already accounts for the use of EVs, and multipliers are no longer appropriate as incentives. The standard is the incentive in this case. Prior to MY 2027, any EPA projections of EV penetration rate will more than likely be lower than what the industry and market will produce. That is the nature of the fluid situation in these near-term years, where positive but currently unexpected progress is likely to result from an industry that is investing its expertise and large resources towards this goal. Given this, EPA should err on the side of larger, not smaller, reductions in the level of the multipliers.

There is a wealth of information available to EPA that supports this approach to the GHG standards. The recent government-funded National Renewable Energy Laboratory (NREL) report projects that ZEV sales could reach 42% of all medium-duty (MD)/HD trucks by 2030, reflecting lower combined vehicle purchase and operating costs (see [Decarbonizing Medium- & HD On-Road Vehicles: Zero-Emission Vehicles Cost Analysis](#)). The International Council on Clean Transportation is an important source of technical and other information on the transition to electrification in the HD and other sectors. For example, see [Racing to zero: The ambition we need for zero-emission heavy-duty vehicles in the United States](#). These are just a few examples of the wealth of information available to EPA showing the potential

for HD EVs to support a more aggressive regulatory approach to this sector. We expect many organizations and States will provide comprehensive sources of information to EPA in their comments. EPA's final decision needs to address the need for a much more aggressive but practical set of near-term GHG standards for this sector.

Conclusion

EPN strongly recommends that EPA strengthen both the NO<sub>x</sub> and GHG requirements in the Final Rule in ways that maintain EPA leadership in improving air quality and public health and addressing the global climate crisis. Thank you for this opportunity to provide comments.