

# REIMAGINING THE ROAD FOR MEDIUM-AND HEAVY-DUTY VEHICLES (MHDVS) IN LATINO COMMUNITIES



## What are MHDVs?

Vehicles weighing over 10,000 pounds. They include buses, freight trucks, and other transport and fleet vehicles. MHDVs produce a disproportionately large portion of Greenhouse gas (GHG) emissions and significant amounts of air pollution. Cleaner MHDVs are a great public and private investment; by replacing a relatively small number of vehicles we can significantly reduce GHG emissions.

## Urgent Need for Action

Transportation is the largest source of GHG emissions in the U.S. In 2018, transportation accounted for 28% of GHG emissions. GHG's cause climate change by trapping heat, and they also contribute to respiratory disease from smog and air pollution.

MHDVs, school and public transit buses, freight, and other fleet vehicles, are responsible for 23% of transportation emissions despite being only 5% of vehicles on the road.

## Centering environmental and spatial justice

GHG emissions and air pollution harm all people, but not equally.

**Latinos and communities of color are exposed to higher levels of air pollution from vehicles than their white counterparts.** In California, Latinos experience 39% percent higher levels of fine particulate matter (PM2.5 are microscopic airborne particles that can penetrate deeply into the lung and impair lung function) exposure than whites; in the Northeast, the rate of exposure for Latinos reaches 75% higher.

Across the board, PM2.5 exposure rates are higher among low-income people and people who do not own a car. Undesirable transportation infrastructure, including highways, ports, and other high-traffic arteries, are disproportionately located in low-income areas and communities of color. For example, in California, the lowest income households (earning less than \$20K annually) are exposed to 25% more PM2.5 pollution than the highest earning households. In the Northeast, communities of color breathe 66% more PM2.5 pollution than white residents.

This exposure creates detrimental health consequences. **Latinos are twice as likely to visit the emergency room for asthma than whites**, and Latino children are twice as likely to die from asthma than their white counterparts.

GreenLatinos urges immediate policy action to mitigate the impacts of vehicle emissions on human health and to protect the future of the planet.

# Today's Policy Roadmap

It has not been a straight road to strengthening emissions standards.

2011

EPA and National Highway Transportation Safety Administration (NHTSA) establish Phase 1 standards for Heavy-Duty Vehicles with model years 2014-2018. The standards applied to tractors, pickup trucks, and vans, but not to commercial trucks.

MARCH 2020

The Safer Affordable Fuel Efficient (SAFE) Vehicles Rule created by the Trump Administration weakened an existing Obama-era rule, reducing the requirement for automakers to improve fuel efficiency from 5% to 1.5% annually for new vehicles with model years 2021 - 2026.

2021

Biden administration pledges to make climate change a top policy priority with plans to develop "rigorous new fuel economy standards aimed at ensuring 100% of new sales for light- and medium-duty vehicles will be zero emissions and annual improvements for heavy duty vehicles."

1975

Energy Policy and Conservation Act direct the U.S. Secretary of Transportation to establish Corporate Average Fuel Economy (CAFE) standards for new passenger cars. In 2007, CAFE standards increased standards for passenger vehicles and established efficiency standards for MHDVs.

2016

Phase 2 standards finalized, applying to certain tractor trailers, semi-trucks, large pickup trucks, vans, and all buses and work trucks of model years 2021-2027. Phase 2 standards for box trailers were stayed by court order.

JULY 2020

15 states and DC announce a joint memorandum of understanding (MOU) to "ensure national progress in the effort to reduce greenhouse gas (GHG) emissions and stabilize global warming." With this MOU, the states commit to supporting market for zero and low-emission MHDVs. An action plan, known for now as the Zero Emission Medium- and Heavy-Duty Vehicle Action Plan, will be released in early 2021.

## Current Federal Policy Challenges

→ Emissions regulations are not clearly nor uniformly enforced, and loopholes remain.

For example, current standards say vans should reduce fuel consumption by 16% while delivery trucks should reduce by 24% by 2027. Difference between these MHDV types is negligible, and they are often used interchangeably. This is confusing, unhelpful policy does not do enough to address the urgent need to shift to zero-emissions vehicles (ZEVs) and low-emission vehicles (LEVs) across the board.

→ No coordinated market incentives.

Today, no federal policy incentivizes manufacturers to develop zero and low emission MHDVs, which means continual detrimental impacts for clean air and water, and human health outcomes. While a patchwork of state and regional policy does exist, it is not enough. Only federal policy can create the market incentive needed for the production of new ZEV and LEV technology across all transportation sectors.

## Potential High-Impact Policy Actions

→ Accelerate Incentives and Mandates for ZEVs and LEVs

Mandates for sales of ZEVs and LEVs should expand beyond cars to include MHDVs. Only by creating concrete timelines for sales benchmarks can we begin and sustain a meaningful phase out of gasoline-powered vehicles of all sizes and functions. In New York, the state government has set up a \$20M voucher program that aims to replace older diesel trucks with cleaner trucks by providing point-of-sale rebates that reduce the incremental cost of purchasing clean trucks and buses by up to 95%.

**MODEL:** Zero-Emission Vehicles Act (H.R. 2764, 2020) seeks to create jobs, improve health, and mitigate climate damage by ending sales of new gasoline-powered vehicles by 2035.

This legislation creates a guaranteed market for EVs by 2035, incentivizing automakers to invest in design and technology, and spurring governments and utilities to finance and build necessary infrastructure and grid upgrades:

- Sets a Federal ZEV standard to boost the market for battery and hydrogen fuel cell EVs, fixing the current patchwork of state-level and regional policies and standards.
- Requires that by 2025, 50% of new passenger vehicles sales are ZEVs, ramping up to 100% by 2035.



## → Fully Electrify Public Fleets

Public fleets -- including buses, refuse trucks, and other vehicles -- are an achievable and high-impact target for MDHV electrification and decarbonization. [Analysis from AMPLY Power](#) shows that the 25 largest metropolitan areas in the U.S. could save an average of 37% on fuel costs by electrifying their vehicle fleets.

**MODEL: [Moving Forward Act](#) (H.R. 2, 2020)** is a \$1.5T+ plan to rebuild US infrastructure across the board, and includes specific provisions about public fleet electrification:

- Invests \$100B+ in transit to put more zero-emission buses on the road, adds new routes, and provide more reliable service, resulting in better transit options.
- Invests in and emphasizes resiliency while reducing carbon pollution from transportation, including \$1.4B for charging infrastructure.
- Invests \$25B to modernize USPS infrastructure and operations, including a ZEV fleet.

## → Prioritize School Bus Electrification

We need to prioritize transitioning to electric school buses, starting in low-income and communities of color where students and families are most at risk. Exposure to toxic emissions from diesel school buses results in respiratory illnesses. There exists dire need to build on the actionable success of policy like the Diesel Emissions Reduction Act of 2010 (DERA), which created an annual rebate program reducing emissions from older, dirtier vehicles. This rebate program has funded vehicle replacements and retrofits for over 2,000 vehicles since 2011.

**MODEL: [Clean School Bus Act \(S.1750, 2019\)](#)** prioritizes frontline and vulnerable communities to transition their aging school bus fleets to zero-emissions electric school buses:

- Provides grants of up to \$2M to replace diesel school buses with electric school buses, invest in charging infrastructure, and support workforce development.
- Prioritizes applications serving lower-income students, and that leverage funding to further decrease pollution and emissions, including through partnerships with local utilities.
- Authorizes \$1B for the Department of Energy to fund a Clean School Bus Grant Program to spur clean technology adoption.

## Medium and Heavy Duty Vehicles (MHDV) Classifications

<b>Light Duty</b>	<b>Class 1 - 6,000 lbs &amp; Less</b>  Minivan  Cargo van  SUV  Pickup Truck
	<b>Class 2 - 6,001 to 10,000 lbs</b>  Van  Cargo van  Full-size Pickup Truck  Step Van
<b>Medium Duty</b>	<b>Class 3 - 10,001 to 14,000 lbs</b>  Walk-in  Box Truck  City Delivery  Heavy Duty Pickup Truck
	<b>Class 4 - 14,001 to 16,000 lbs</b>  Large Walk-in  Box Truck  City Delivery
	<b>Class 5 - 16,001 to 19,500 lbs</b>  Bucket Truck  Large Walk-in  City Delivery
	<b>Class 6 - 19,501 to 26,000 lbs</b>  Beverage Truck  Single-Axle  School Bus
<b>Heavy Duty</b>	<b>Class 7 - 26,001 to 33,000 lbs</b>  Refuse  City Transit Bus  Truck Tractor
	<b>Class 8 - 33,001 lbs &amp; Over</b>  Cement Truck  Truck Tractor  Dump Truck  Sleeper