

Electrifying Medium and Heavy Duty Vehicles

Across the United States, the transportation sector is a leading source of harmful, lung-damaging air pollution that threatens public health and worsens climate change. Low-income communities located in freight and transportation hubs that see thousands of medium and heavy-duty trucks traverse their neighborhoods suffer some of the worst of our nation’s air pollution and health burdens.

Fortunately, widespread zero-emission technology is available today for electric trucks, vans and buses that will help cut emissions to save lives and avoid health emergencies, with many estimates demonstrating that annual health benefits range from tens of millions of dollars to billions of dollars per year.

Exposure to dangerous air pollution can cause increased asthma attacks, heart attacks and strokes, lung cancer and premature death:

- The American Lung Association’s 2023 “State of the Air” report found that more than 3 in 10 Americans - nearly 120 million - live in counties impacted by unhealthy levels of ozone and/or particle pollution.
- People of color are 3.7 times more likely to live in a community with the worst pollution in the United States.
- 72 million Americans live in close proximity to heavy trucking corridors and are more likely to be people of color and have lower incomes.

The Transportation Sector

- Is the largest source of greenhouse gas emissions.
- Medium- and heavy-duty vehicles:
 - Represent around 6% of the on-road fleet as of 2020, but generate 59% of NOx emissions and 55% of the particle pollution.
 - Contribute significantly to harmful particle pollution and local diesel exhaust impacts that threaten lung health.

Protecting the health of our families with electric trucks

The transportation sector must move comprehensively to 100% zero-emission trucks no later than 2040, which will unlock health benefits for all Americans, especially those in underserved communities most impacted and vulnerable to the burdens of harmful pollution.



The importance of policy advocacy in achieving zero-emissions

The switch to zero-emission vehicles will yield billions of dollars in health benefits and save tens of thousands of lives across the U.S.

Actions taken today by local, state, and federal agencies to transition away from heavy-duty vehicle combustion engines will establish a crucial course to clean transportation and healthier air in communities across the country.

Zero-emission trucks and power will bring major benefits to communities with heavy truck routes – By 2050:

- Add up to \$735 billion in avoided health harms
- Save approximately 66,800 lives
- Avoid 1.75 million asthma attacks
- Avoid 8.5 million fewer lost workdays

The American Lung Association recommends the following policy actions:

- The US EPA must finalize the next round of greenhouse standards to accelerate the transition to zero-emissions in the heavy-duty truck sector by the end of 2023.
 - This will significantly reduce climate pollution from trucks and bring the health benefits of zero-emission trucks to communities across the U.S.
- At all levels, governments must invest in electric vehicle infrastructure.
 - The Inflation Reduction Act and the Infrastructure Investment and Jobs Act provide important incentives for jump-starting electric charging infrastructure. These initial investments must serve highly impacted communities, ensure strong emphasis on infrastructure that serves heavy-duty vehicles and ensure a robust shift to non-combustion energy generation in urban and rural settings.
- States must adopt the Advanced Clean Truck (ACT) Standard.
 - States have a clear avenue to accelerate the benefits of zero-emission trucking in communities throughout their states: adopt the Advanced Clean Truck standards, which require increasing sales of zero-emission trucks over time.

