

# FRESH AIR FOR AT-RISK CHILDREN

## A Generational Opportunity for Fleet Electrification



### VEHICLE POLLUTION THREATENS THE HEALTH OF VULNERABLE POPULATIONS.



Children, the elderly, and those with chronic diseases are most vulnerable to particulate emissions from gas and diesel engines.

### TRANSPORTATION EMISSIONS CONTRIBUTE TO RESPIRATORY ILLNESSES IN CHILDREN.

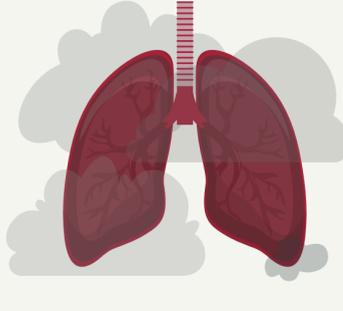


According to the American Lung Association, **120 MILLION AMERICANS** reside in areas failing air quality standards;

**27 MILLION CHILDREN** under age 18 live in communities adversely affected by emissions.

A pivotal February 2024 report by the American Lung Association (ALA), titled "Boosting Health for Children: Benefits of Zero-Emission Transportation and Electricity," outlines the transformative effects a nationwide shift to zero-emission transportation by 2040 could have on children's health.

- 2.8 MILLION** fewer cases of pediatric asthma attacks;
- 1.9 MILLION** fewer lower respiratory incidents;
- 2.7 MILLION** reductions in upper respiratory symptoms;
- 147,000** fewer acute bronchitis cases;
- OVER 500** prevented infant deaths.



### ELECTRIFYING COMMERCIAL FLEETS OFFERS IMMEDIATE BENEFITS.

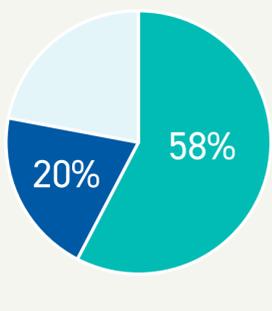
- 30%** of fossil fuel emissions — transportation
- 276 MILLION** registered vehicles
- 37 MILLION** trucks

Transportation comprises nearly **30% of fossil fuel emissions** profile in the U.S.; fleets account for a significant percentage of vehicle-generated emissions. According to the Bureau of Transportation Statistics, out of the **276 million registered vehicles** in the U.S., **13.7 percent are trucks** (about 37 million vehicles). Of these, about **11 million are medium- or heavy-duty trucks**.



Despite advancements in emissions control, a typical car still releases approximately **4.6 metric tons of carbon dioxide** annually and a medium-/heavy-duty fleet vehicle emits roughly **20 to 40 percent more carbon dioxide per mile** due to their much lower fuel efficiency.

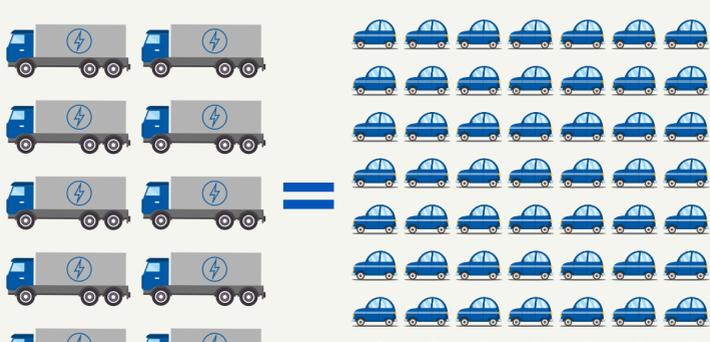
Given their outsized impact on GHG emissions and community health, fleets are the lead candidate for electrification with results that can be immediately felt.



Light-duty trucks alone are responsible for 58 percent of the transportation sector's greenhouse gas emissions. Larger industrial vehicles make up about another 20 percent of transportation emissions.

- LIGHT-DUTY TRUCKS
- LARGER INDUSTRIAL VEHICLES

Furthermore, an Australian study highlighted that electrifying just **10 urban delivery trucks** has the same emission reduction impact as **56 households switching to EVs**.



### FLEET OPERATORS HAVE UNIQUE ADVANTAGES IN ADOPTING ELECTRIC VEHICLES.



Business-specific incentives, bulk purchasing power, access to **Charging-as-a-Service** (experienced third-party solutions to EV fleet charging infrastructure). Even more impactful, for fleets that contract with renewable power generation as electric supply to charge, there is a compelling, **fully zero-emission energy pathway**, from generation of the electricity to its use to power a vehicle.

Prioritizing fleet electrification is a necessary step towards a sustainable future and a healthier environment for all vulnerable groups, especially children.



Prioritize the health of our communities by electrifying your commercial fleet, taking advantage of today's growing landscaping of electrification infrastructure solutions that are designed to accelerate the transition to zero-emissions, all-electric fleets.

[Learn how to electrify your fleet at electrada.com](https://www.electrada.com) →

Additional Information  
 a. Source Credits: American Lung Association, Bureau of Transportation Statistics, etc.  
 b. These are all the sources from the article. Feel free to use the ones you need:  
 I. <https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/truck-co2-emissions-per-km-calculator/#:~:text=How%20Much%20CO2%20Does%20a,26%25%20of%20the%20emissions%20data>  
 II. <https://afleet.es.anl.gov/hdv-emissions-calculator/>  
 III. <https://www.netradyn.com/blog/trucking-statistics-and-facts-for-fleet-managers-2022#:~:text=According%20to%20the%20American%20Trucking,the%20government%20and%20for%20farms>  
 IV. <https://www.bts.gov/content/us-automobile-and-truck-fleets-use-thousands>  
 V. <https://ourworldindata.org/co2-emissions-from-transport#:~:text=Road%20travel%20accounts%20for%20three,comes%20from%20trucks%20carrying%20freight>  
 VI. <https://www.bts.gov/content/estimated-national-average-vehicle-emissions-rate-vehicle-type-using-gasoline-and>  
 VII. <https://www.npr.org/2024/03/29/1241410274/emissions-heavy-duty-trucks-use-epa>  
 VIII. <https://www.bts.gov/browse-statistical-products-and-data/national-transportation-statistics/number-us-truck>  
 IX. <https://www.epa.gov/transportation-air-pollution-and-climate-change/smog-soot-and-other-air-pollution-transportation>