

## Cleaner air starts with cleaner buses.

Minimize your students' exposure to harmful emissions and save money at the same time by transitioning your school bus fleet to natural gas power.

Natural gas buses provide communities across the U.S. with a clean, reliable, and cost-effective transportation option for school children.



# Formulate a New Emission Statement for Your School District



## Help Your Students Catch Their Breath

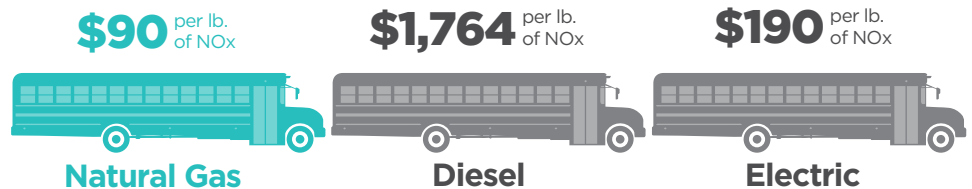
Breathing in vehicle particle pollution (including nitrogen oxides, or NOx) increases the risk of asthma, lung cancer, heart disease, and premature death. Today, there are 6.2 million America with asthma under the age of 18, and asthma is the leading chronic disease in children. It is also the leading reason for missed school days.

*Source: Centers for Disease Control and Prevention*

**No Proven Commercially-Available School Bus Powertrain Solution Today Runs Cleaner than Natural Gas.**

Natural gas engines are the only zero emission equivalent or near-zero engines that are certified by both the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) to perform 90 percent cleaner than their cleanest diesel-burning counterparts. And when powered by renewable natural gas captured from agricultural, food, landfill, or wastewater waste, the result in some cases can be a carbon neutral or even negative product.

*Source: U.S. EPA, CARB*



## Most Cost-Effective NOx Emissions Reductions

Dollar-for-dollar, natural gas vehicles deliver the most cost-effective NOx emissions reductions. Natural gas school buses are up to **95 percent more cost effective** than diesel alternatives and **53 percent more cost-effective** than limited and unproven electric options.

*Source: Argonne National Laboratory, HDVEC Tool*



Find out more about championing reduced bus emissions for your students at [www.ngvamerica.org](http://www.ngvamerica.org).

**NGVAMERICA**  
Natural Gas Vehicles for America

**\$35,000**  
fuel savings  
per bus

(for anticipated 15 year vehicle life)

## Clearing the Air Doesn't Have to Break the Bank

Natural gas buses offer a fast return-on-investment (ROI) due to low fuel and maintenance costs.

With today's oil prices, natural gas prices can be \$1 or more lower than diesel at the pump. This price differential quickly translates into substantial fuel savings for school buses, which typically consume around 2,300 diesel gallon equivalents (DGEs) per year, and have tough-duty cycles, low miles per gallon, and high engine hours.

Natural gas buses are easier to maintain than diesel counterparts:

- No diesel particulate matter filter regeneration or waste
- No selective catalytic reduction
- No diesel emissions fluid



## Natural Gas is Now

Why wait for ultra-expensive electric technology to be developed and proven? Natural gas buses are affordable and sustainable now, especially when fueled with renewable natural gas.

Natural gas is abundant and domestic. And natural gas is widely available with a well-established and growing infrastructure. See for yourself at: [www.ngvamerica.org/fuel/](http://www.ngvamerica.org/fuel/).

Join the more than 150 U.S. school districts operating over 5,500 natural gas school buses today in clearing the air for our kids. No investment in reducing asthma-producing school bus emissions is as cost effective as natural gas.

5,500  
NGVS TAKE  
CHILDREN TO SCHOOL  
IN THE U.S.



## Calculate Natural Gas Emissions Benefits Yourself

Compare emissions of commercially-available alternative fuel medium- and heavy-duty vehicles with the Heavy-Duty Vehicle Emissions Calculator (HDVEC) tool.

Developed by the U.S. Department of Energy's Argonne National Laboratory using its AFLEET Tool 2017, this online resource aids school bus fleet managers and decision makers in comparing vehicle emission reduction options to assist in maximizing their new vehicle funding investment.

Accessible online at:  
<http://afleet-web.es.anl.gov/hdv-emissions-calculator/>  
or <http://www.ngvamerica.org/vwactioncenter/>.



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