

The unique benefits of this clean, American fuel make it the perfect solution for schools to cut emissions while saving more for what counts.

### **THE GOAL**

The Volkswagen Environmental Mitigation Trust Fund will financially support actions that reduce Nitrogen Oxide (NO<sub>x</sub>) emissions in the United States. The amount of funds distributed will vary by state or territory, depending on the number of non-compliant Volkswagen vehicles that were registered there.

### THE OPPORTUNITY

States should consider including propane-powered school buses in their plans to utilize the Volkswagen settlement funds. School districts that have the opportunity to purchase new propane autogas school buses reduce the amount of harmful diesel emissions — known aggravators of asthma and other breathing issues — around their students. Depending on a school's situation, it can significantly reduce NO<sub>x</sub> emissions with propane autogas school buses.

THE SWITCH	REDUCED NO <sub>x</sub> Emissions
Replace all older than model year-2007 diesel buses with new propane autogas buses.	More than 92 percent <sup>1</sup>
Purchase a new propane autogas bus instead of a modern, lower-emissions diesel bus.	More than 11 percent <sup>2</sup>
Purchase a modern, best-in-class for NO <sub>x</sub> emissions propane bus instead of a modern diesel bus.	81 percent <sup>3</sup>
<ol> <li>Source: AFLEET model using Polk Registration data by state for diesel buses – 12/31/2015. By removing 255,627 of pre-2007 diesel fueled buses from the road across the country and replacing them with new</li> </ol>	

propane autogas school buses, NOx emissions would be reduced by 92 percent. 2. MY2016 certification data for PSI 8.8L propane model compared with Cummins 6.7L diesel model.

3. CARB low NOx certification data for MY2017 Roush 6.8L propane model compared with MY2016 Cummins 6.7L diesel model.

Schools that use propane-powered school buses can reach their sustainability goals without additional, costly emissions technology.



"I think the environmental aspect of it is important to a lot of people, especially parents with young children."

# Brian Woods

Superintendent, Northside Independent School District San Antonio, Texas

## THE PROPANE AUTOGAS SOLUTION

Modern diesel buses come with a hefty price tag for complicated emissions-reduction technology. Propane autogas buses reduce NO<sub>x</sub> emissions while helping schools save for what matters most — classroom supplies, more teachers, extracurricular programs, and more.



#### LOWEST TOTAL COST-OF-OWNERSHIP

The costs of diesel add up quickly: expensive fuel, additional fluids, and pricey particulate filters. These are the most influential reasons why propane buses save schools more money, from purchase to retirement of the asset.



#### **MORE UPTIME**

With propane, schools can eliminate downtime linked directly to maintenance and unexpected repairs. Propane buses also provide superior cold-weather performance compared with diesel.



#### **SAFE FOR EVERYONE**

Propane buses operate noticeably quieter than diesel models, allowing drivers to better focus on their passengers and the road. Standard safety features designed into propane bus fuel systems provide added peace of mind for everyone.

#### AFFORDABLE INFRASTRUCTURE

School districts can choose private, on-site refueling infrastructure scaled for their needs, or take advantage of existing public or private refueling networks. Go to **propane.com** to learn more about standard private stations and advanced private stations, including typical costs.



#### **AMERICAN FUEL**

Using propane school buses supports our country's economy — nearly 90 percent of propane supplies are produced in the U.S.



### SAVE ON THE 3 FS

Propane buses lower total cost-of-ownership by saving money in these three key areas:



# FUEL

The cost of wholesale propane falls between the price of oil and natural gas, the fuel's two sources. As a result, propane is historically less expensive than conventional fuels, even as fuel prices fluctuate.



### FLUIDS

New, lower-emissions diesel technology comes with an added inconvenience: diesel emissions fluid to purchase, store, and change. This is on top of needing more oil by volume compared with propane. In cold temperatures, diesel vehicles also require anti-gelling agents to prevent clogging of fuel filters and lines. Propane provides reliable performance without additional fluids.



### FILTERS

To meet emissions requirements, new diesel technology requires diesel particulate filters that must be cleaned periodically. Excessive idling will accelerate cleaning intervals. Either way, extra maintenance expenses are piled on top of additional lifecycle costs.

### **OTHER CONSIDERATIONS FOR PROPANE**

#### MAINTENANCE FACILITY NEEDS

Switching from conventional fuel to propane is quick and cost-effective, because the requirements for a propane vehicle repair facility are generally the same as those for conventionally fueled vehicles. Other alternative fuels, however, may require different facility requirements than conventional fuels, like additional gas detection and ventilation equipment — costing fleets more to switch.

Contact your local Authority Having Jurisdiction for applicable codes regarding building or modifying a propane-powered vehicle repair or maintenance facility.

To learn more about the benefits of propane school buses, visit **propane.com**.