AUTOGAS NEWSLETTER

SHARP
AUTOGAS
SPRING/SUMMER 2023
NEWSLETTER

FEATURED STORY

CASE STUDY:

NORTH PENN SCHOOL DISTRICT

LANSDALE, PENNSYLVANIA

Roush Clean Tech performed a case study on North Penn School District in Lansdale, PA. North Penn began transitioning school buses to propane autogas in 2019. They chose this alternative fuel because of the cost savings it generates (price per gallon and grant funding/credits), along with the emissions level being close to zero. They saw it as a tremendous benefit and are continuing to convert their fleet from diesel to propane power. Anticipated annual gallons for the upcoming school year will be over 300,000.

> *"At $2.66 less per gallon than our diesel buses, the fuel savings with our propane buses is second to none."*
>
> **—DENNIS RYAN, COORDINATOR OF TRANSPORTATION**

Autogas Training – Florida Fall 2022

Sharp Energy visited Blue Triton Brands (Ready Refresh) in Jacksonville and Jupiter, Florida this past fall for continuing education and safety on training on their autogas fueling stations.

Do you have new employees or need a refresher course on how to use your propane fueling station? To schedule a time, call your local Sharp office or point of contact.

Jupiter, FL

Jupiter, FL

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Legislation aimed at emissions reduction from our school bus fleets should include propane autogas as a safe, reliable and clean energy alternative.

Benefits of Propane Over Electric

Why you made the right choice fueling your fleet with autogas:

- **CLEAN BURNING FUEL** – reduced emissions
- **ECONOMICAL** – fuel and vehicle maintenance costs lowered
- **RELIABLE** – optimal vehicle performance

Buses and fuel are less expensive to operate and easier to maintain making autogas a budget friendly option for local school systems.

Autogas from propane is a sensible fuel alternative that can help achieve its carbon reduction goals.

Allows harder-to-decarbonize communities to reduce emissions from the transportation sector without significant infrastructure investments.

Autogas is Clean, Safe and Affordable

Meeting our urgent climate goals will require solutions like propane autogas that can be implemented and scaled today at a lower costs than traditional fuels. Considered a clean alternative fuel by the EPA, propane autogas is a safe, abundant and affordable fuel source, making it a powerful tool in our efforts to rescue carbon emissions from our transportation and energy sectors. Produced in North America, propane autogas supports our ability to integrate renewable fuels in our energy systems, while providing critical energy.

Emissions Reductions

A study by West Virginia University found that emissions from propane school buses are significantly lower than those of diesel buses. For the typical stop-and-to route, emissions of nitrogen oxides (NOx) were 34 times lower for propane than for diesel buses. On city and highways roads, emissions were 15 to 19 times lower.

Improved Health Outcomes

Researchers at Georgia State University recently found that cleaner-running school buses like those fueled with propane are making a big difference. The study estimated that reducing emissions for a school district's entire fleet could lead to a 7.8 percent gain in English test scores and an improvement to students' respiratory health.

How Much Clean Power Can $1 Billion Buy?

Propane Autogas

9,433 Buses

1,188,558

Metric tons of reduced CO_2

Electricity

2,857 Buses

428,500

Metric tons of reduced CO_2

When considering vampire loads associated with electricity, propane autogas offers the best path to decarbonization with available funding.

Dynamic and Innovative

In today's energy mix, renewable fuel alternatives like propane autogas are a crucial component in lowering carbon emissions from the transportation sector. On the path to net zero, autogas is the ideal bridge fuel. It works with internal combustion and hybrid electric engines and supports the development of solar infrastructure reducing emissions by 96% compared with clean diesel buses for 30% to 50% less cost per mile. Propane autogas also supports our ability to reduce toxic particulate matter from diesel exhaust that contributes to allergies, asthma and lung cancer in communities across the state.

For more information, or to join the Clean Energy Choices Coalition, visit cleanenergychoices.org or propane.com

Autogas questions? Call or email Mike Petito
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@sharpautogas

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Propane autogas should be a part of any legislative approach to reduce emissions from hardest-to-decarbonize sectors.

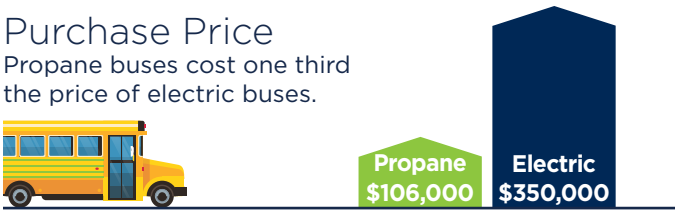
Propane vs. Electric

Program school buses cost less, travel further, fill up more quickly and have a smaller carbon footprint than electric buses.

It's no wonder that school districts across America are making the switch to propane.

Purchase Price

Propane buses cost one third the price of electric buses.

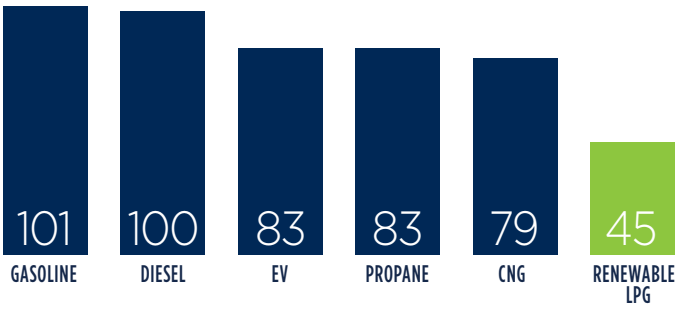


Range

Propane buses can drive more than twice as far as electric without refueling.

ELECTRIC	PROPANE
up to 120 miles per charge	up to 300 miles per 67 gallon tank

Carbon Intensity Scores



Carbon intensity [g CO_2/MJ]

A Cost-Effective Resource

The cost of an autogas-powered school bus averages $120,000, compared to the average cost of an electric school bus, which is approximately $400,000. Autogas bus can drive an average of 400 miles before refueling, in contrast to the average electric bus, which ranges only 70 miles before charging is required. As an important tool in our fight against climate change, autogas allows us to reduce emissions from transportation before our electric vehicle infrastructure is capable of meeting our emissions reductions needs.

Funding Available for 2023 Clean School Bus Program

The United States Environmental Protection Agency (EPA) is currently awarding approximately $400 million in competitive grant funding under the Clean School Bus (CSB) Grants Program Notice of Funding Opportunity (NOFO). Applications should be submitted through Grants.gov no later than Tuesday, Aug. 22, 2023, at 11:59 p.m. (ET).

This is part of the EPA's mission to award $1 billion to 389 school districts for electric and low-emission school buses through the 2023 Clean School Bus Program. The program aims to deliver cleaner air for communities across the country.

With funding from the Bipartisan Infrastructure Law, the EPA's new Clean School Bus Program provides $5 billion over the next five years (FY 2022-2026) to replace existing school buses with zero-emission and low-emission models.

Displayed in the chart below is a comparison of propane autogas prices versus gasoline prices. Autogas customers can see significant savings.

PROPANE VS. GASOLINE PRICES

Market	Propane Prices	Gasoline Prices	Price Difference
Delaware	$1.85	$3.39	$1.54
Florida	$1.97	$3.09	$1.12
Maryland	$2.05	$3.35	$1.30
Pennsylvania	$2.23	$3.55	$1.32

Prices as of 06/5/23. Average gasoline prices found on gasbuddy.com

ADDITIONAL INFO IF NEEDED

Propane vs. Electric: **trendinginpropane.com/propane-vs-electric-price-comparison**

TRUCK INDUSTRY INFO | Fleet Vehicles | PERC (**propane.com**)

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